

# THE TECHNOLOGY REVIEW

RELATING TO THE MASSACHUSETTS  
INSTITUTE OF TECHNOLOGY



MAY  
1924

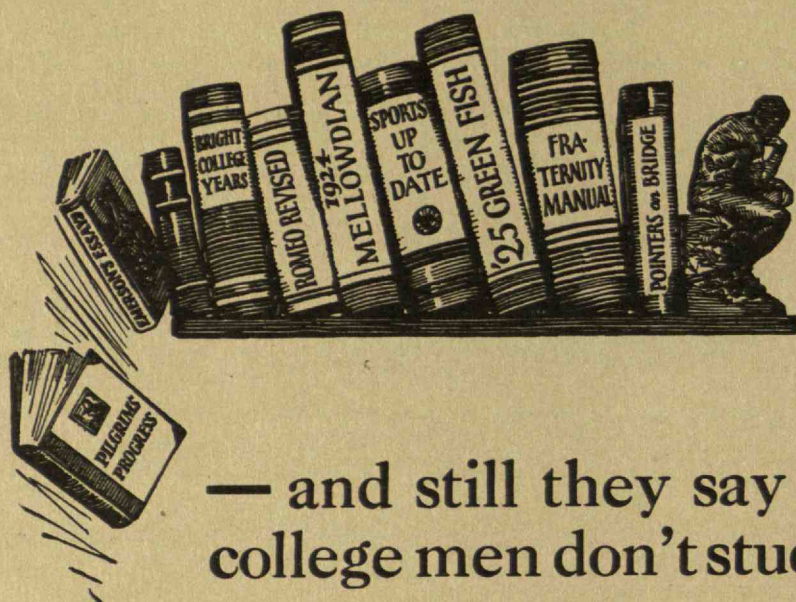
PUBLISHED BY THE ALUMNI ASSOCIATION

# technology review

Published by MIT

This PDF is for your personal, non-commercial use only.  
Distribution and use of this material are governed by copyright law.  
For non-personal use, or to order multiple copies please email  
[permissions@technologyreview.com](mailto:permissions@technologyreview.com).





## — and still they say college men don't study!

The critic who charges college men with lack of diligence never heard a freshman repeat his roll of fraternity chapters without a slip, or a senior dilate on the life history of every football captain from 1890 on.

Of course this takes study—sometimes too much study. The student must be cautioned against the mental strain resulting from concentration on too limited a field of thought.

It is a good thing to specialize, but not to the extent of becoming narrow. If it is right for the man who concentrates on engineering to be up on his campus activities, it would seem right for the man who is quoted on the history and philosophy of Comparative Baseball Scores to have some knowledge of the chemistry and thermodynamics from which he expects to make his living.

For it is still true that in industrial councils the talk sometimes swings from batting averages to coefficients of expansion and the hysteresis losses in iron.

This is all a matter of balance, and satisfactory mental balance is a means to an important end—satisfactory bank balance.

*Published in  
the interest of Elec-  
trical Development by  
an Institution that will  
be helped by what-  
ever helps the  
Industry.*

## *Western Electric Company*

*This advertisement is one of a series in student publications. It may remind alumni of their opportunity to help the undergraduate, by suggestion and advice, to get more out of his four years.*



# Stone & Webster Horse Power Measured by Cities

**T**HE combined capacity of the power stations designed and built, or now being built, by the Stone & Webster organization is a substantial part of the country's total.

It would supply the needs of the consumers in Baltimore, Boston, Buffalo, Cincinnati, Cleveland, Dallas, Detroit, El Paso, Fall River, Hartford, Indianapolis, Los Angeles, Milwaukee, Minneapolis, New Bedford, New Orleans, Portland, Ore., Pittsburgh, St. Louis, San Francisco, Savannah, Seattle, Washington, D.C., and Youngstown.

Most of these cities now receive or soon will receive power from stations designed and built, or now being built, by Stone & Webster.

---

## STONE & WEBSTER INCORPORATED



NEW YORK, 120 Broadway  
SAN FRANCISCO, Holbrook Bldg.

BOSTON, 147 Milk Street

CHICAGO, 38 S. Dearborn Street  
PHILADELPHIA, Real Estate Trust Bldg.



---

---

DWIGHT P. ROBINSON & COMPANY  
INCORPORATED  
ENGINEERS AND CONSTRUCTORS

*Design and Construct*

Hydro Electric Developments

Steam Power Plants

Industrial Plants

Railroad Shops

*Construct*

Office and Apartment  
Buildings

125 EAST 46TH STREET  
NEW YORK

---

Chicago	Los Angeles	Philadelphia	Montreal	Youngstown	Rio de Janeiro	Atlanta
---------	-------------	--------------	----------	------------	----------------	---------

---

---

# THE TECHNOLOGY REVIEW

RELATING TO THE MASSACHUSETTS  
INSTITUTE OF TECHNOLOGY

*Published monthly, from November  
to May inclusive, and in July  
at Cambridge, Mass.*

Vol. XXVI

No. 7

## Contents for May, 1924

*Cover Design by Kenneth Reid, '18*

The Past Month . . . . .	369
Editorial Comment . . . . .	371
Live Issues in Engineering Education . . . . . <i>By W. E. Wickenden</i>	372
The Swope Proposal: A Symposium . . . . . <i>By Eleven Alumni</i>	375
The Ships that Passed . . . . . <i>By Robert E. Rogers</i>	381
The One Hundred and Fifth Meeting of the Council	386
DEPARTMENTS	
Athletics . . . . .	388
News from the Alumni Clubs . . . . .	389
News from the Classes . . . . .	391
Classified Advertising . . . . .	426



H. E. LOBDELL, '17 . . . . . *Editor*  
E. F. HODGINS, '22 . . . . . *Managing Editor*  
R. E. ROGERS . . . . . *Contributing Editor*

PUBLISHED BY THE ALUMNI ASSOCIATION

George L. Gilmore, '90, *President*  
Arthur T. Hopkins, '97, *Secretary-Treasurer*  
Orville B. Denison, '11, *Executive Secretary*

Entered as Second Class Mail Matter at the Post Office  
at Boston, Mass.

Copyright, 1924, by The Technology Review.

TERMS:—\$3.00 a year, in advance; a single copy, 50 cents. To undergraduates of the Massachusetts Institute of Technology \$2.25 per year, in advance, a single copy, 30 cents. Canadian and foreign postage, 50 cents per year additional. Back numbers over three months old, 60 cents each. Three weeks must be allowed to effect changes of address. Both old and new addresses should be given.

# Investment Securities

## Commercial

&

## Travelers' Letters of Credit

## Foreign Exchange

**{ May we send you  
a list of high grade  
bonds we recommend  
for investment? }**

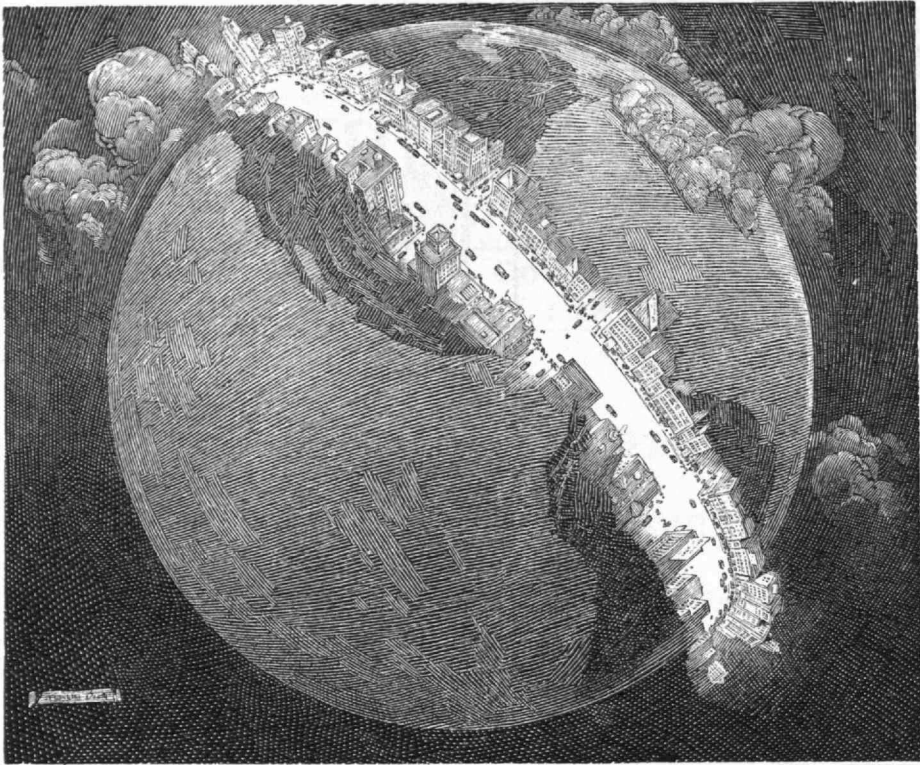
*Established 1848*

## Lee, Higginson & Company

New York Boston Chicago

Higginson & Co.  
London





## Broadway around the world



Compare these huge turbines with the tiny lamp used by surgeons to examine the inside of an ear, and you will realize the variety of G-E products. Between these extremes are lamps, motors, generators, switch-boards and other equipment—all tools by which electricity works for you.

The biggest machines built by the General Electric Company are steam turbine generators of 80,000 horse power, used in great power houses.

One of these giants could generate enough current to run all the street cars in twelve cities as large as Wilmington or Spokane. Ten could light a street as bright as Broadway running around the world.

# GENERAL ELECTRIC

---

# THE TECHNOLOGY REVIEW

RELATING TO THE MASSACHUSETTS  
INSTITUTE OF TECHNOLOGY

Vol. XXVI

MAY, 1924

No. 7

## The Past Month

THE meeting of The Technology Clubs Associated in Detroit on May 19, 20 and 21 continues to be programmed as specified in the April Review. The morning of Monday, May 19, will be devoted to registration at the Hotel Tuller which is to be convention headquarters; the afternoon will be devoted to a general trip around Detroit and in the evening men and women visitors will separate, the men going to a smoker and the women to a bridge party at the hotel.

On Tuesday, May 20, the day will be devoted to a trip to the Ford plant and any other institutions the visitors may wish. For the ladies there will be, that afternoon, a tea at the Detroit Yacht Club. The evening will be given over to class reunions and a business meeting. On Wednesday, May 21, the Committee in Charge has planned a boat trip up the Detroit River which will end just in time to permit visitors to prepare for the banquet (at which there will be tables for the ladies) which will end the three-day meeting.

The Committee in Charge has supplied the following supplementary notes:

The local chapter of the American Institute of Architects will entertain M. I. T. architects on Tuesday afternoon, May 20. The offices of the principal architects in Detroit will be open for inspection. — The new Power Plant of the Detroit Edison Company, now being built under the supervision of Col. A. S.

Douglass, '08, will be in operation and open. — The new Power House of the Canadian Ford Motor Company, situated across the river in Ford City, will also be open for inspection. This plant is operated by a new process, using pulverized coke made by a low temperature by-product process. —

An invitation has been received from the Stout Aeroplane Company to carry as guests, on short trips, Tech men who are especially interested in aeronautics. — Arrangements have been made for visiting golfers to play on any of the 25 golf courses in and around Detroit. — Souvenirs for the banquet are being given by the President of the Technology Clubs Associated. — The Lake boats from Buffalo and Cleveland to Detroit will be in commission and if members, coming from the East and South desire, they may change at Buffalo or Cleveland and make the rest of the trip by boat. Through tickets to Detroit on the New York Central, Grand Trunk and the Wabash Railroads are good for passage on these steamers.



ALEXANDER MACOMBER, '07

© Bachrach

*Who, as Vice-President of the Alumni Association, sprang into Coolidgean prominence at the 105th Council Meeting, in the Southerly absence of Mr. Gilmore.*

PARDONABLE pride takes possession of us this month when we glance at "News from the Classes."

It is not pride in ourselves; it is pride in the efficient and hard-working corp of secretaries whose unrewarded activities make possible the publication of The Review in its present form. From the years 1882 to 1923 every secretary whose notes were scheduled to appear

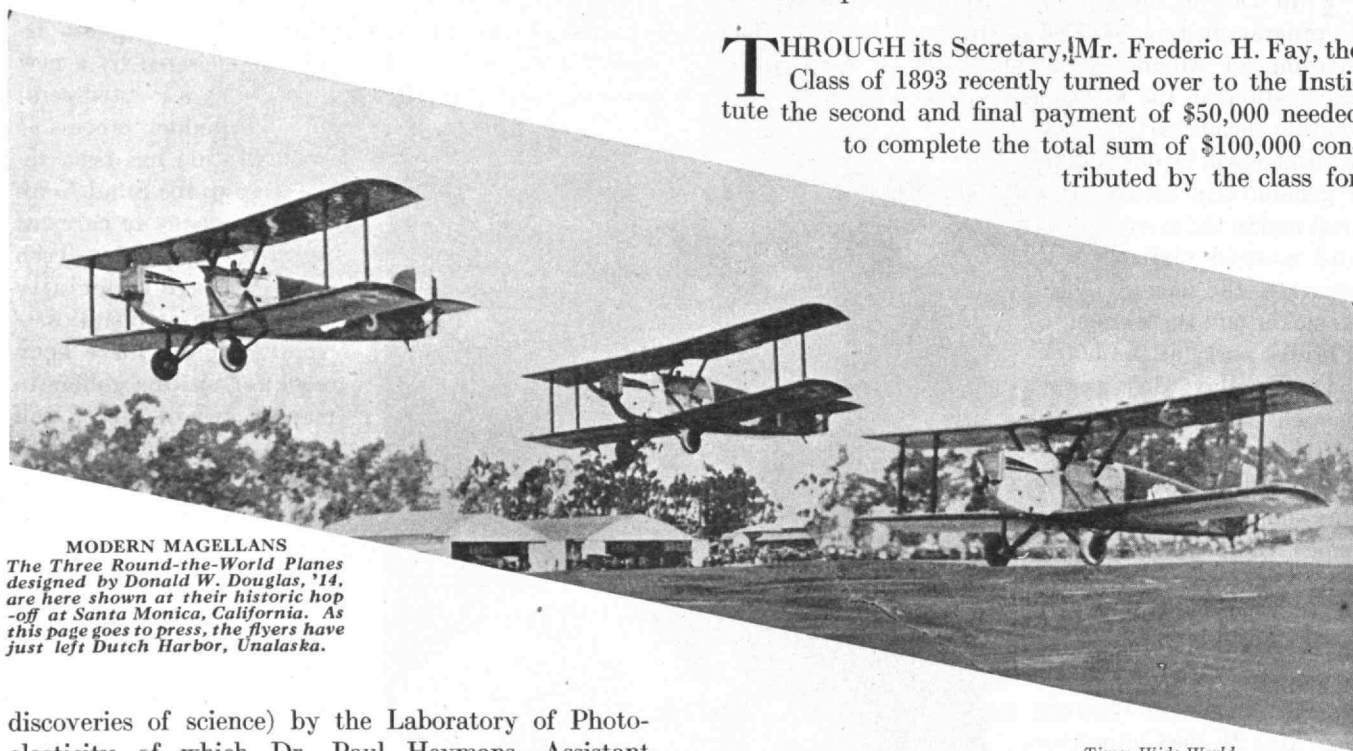


in this issue has responded to the call. There is not one absence, not one perfunctory line of explanation that no notes had been received. As a result, the section contains, this month, approximately 35,000 words in the narrative account of the activities of John Doe, Technology graduate. This is something to be proud of. We salute our correspondents.

**A**NNOUNCEMENT from the Department of Physics states that Technology will be represented at the dedication, on April 28, of the new building erected in Washington for the National Academy of Sciences and the National Research Council. The dedication will take place at the annual meeting of the National Academy of Sciences and the Institute will be represented in the series of exhibits (planned to illustrate striking natural phenomenon and the recent

**A**NEW scholarship fund has been established at the Institute by Mrs. Caroline A. Verges of Boston in memory of her stepson, Luis Francisco Verges, who graduated from the Civil Engineering Department with the Class of '91. Mr. Verges died on December 10, 1910. The fund is to be known as the Luis Francisco Verges Fund and consists of \$10,000, the income of which is to be awarded annually to a meritorious student either a graduate doing research work in the field of the sugar industry or if there be no such candidate, one or more undergraduate students in the Department of Civil Engineering. The award is to be made by Mr. E. L. Verges and Leonard Metcalf, '92, with the approval of the Scholarship Committee of the Institute. In default of any recommendation by these gentlemen, the award will be made by the Scholarship Committee.

**T**HROUGH its Secretary, Mr. Frederic H. Fay, the Class of 1893 recently turned over to the Institute the second and final payment of \$50,000 needed to complete the total sum of \$100,000 contributed by the class for



#### MODERN MAGELLANS

*The Three Round-the-World Planes designed by Donald W. Douglas, '14, are here shown at their historic hop-off at Santa Monica, California. As this page goes to press, the flyers have just left Dutch Harbor, Unalaska.*

discoveries of science) by the Laboratory of Photoelasticity of which Dr. Paul Heymans, Assistant Professor of Theoretical Physics, is in charge. The exhibits which will be established in the central rotunda under the great decorated dome and in the adjoining rooms will be exhibited among other things, the work of Dr. E. L. Nichols, former President of the Institute.

**O**N April 24, Professor P. Ehrenfest, of the University of Leyden, lectured at the Institute. Professor Ehrenfest is one of the foremost living physicists whose contributions in the field of constitution of matter have been considered of paramount importance.

The lecturer visited the laboratories of the Department of Physics in the morning. He was the guest of the President and the Department of Physics for luncheon, and was introduced at his lecture by President Stratton.

*Times Wide World*

the construction of the new dormitory which is to bear its name. Officially at this same time the class recommended to the Executive Committee of the Corporation that the dormitory be known as the "Class of 1893." It is expected that this name will be cut in limestone over the two entrances.

Finishing touches are still necessary to entire completion of construction, but no more than a few of these. The buildings should be ready for occupancy within thirty days.

**M**AJOR Albert S. Smith, Superintendent of Buildings and Power once again proved himself in the forefront of smoke-eaters when the factory of the Hood Ice Cream Company, situated not more than a few hundred feet from the Institute's power house, caught fire about 10:00 o'clock on the night of April 4.

The fire proved most spectacular and resulted in the sounding of a general Cambridge alarm. An emergency call brought Major Smith to the Institute's grounds about 10:45 and soon thereafter the Institute aided the Cambridge Fire Department by setting in operation its largest centrifugal pump, which picked up more tons of water from the Charles River Basin than it is convenient to count and showered them generously on the blazing ice-cream. By about 1:00 o'clock the danger was over and Major Smith was able to doff the rubber coat and steel helmet of the fire-fighter and retire again to his own hearthside. The Institute received the thanks of the City of Cambridge next day.

**R**EADERS of *The Review* are reminded that there is no June issue of the magazine. The eighth and last number of Volume XXVI will be dated July, 1924, and will be placed in the mails on June 23.

## Editorial Comment

**Educating the Engineer** When an institution is sound of wind, and robust in appetite, when it works hard by day, and at night sleeps soundly, its thoughts do not incline to turn upon itself. It is just a trifle too stolid for introspection.

Because it is our belief that Technology inclines slightly to the unimagination of health, and because it is also our belief that a certain capacity for self-criticism is an excellent thing, we particularly welcome to *The Review's* pages the article by William E. Wickenden, titled "Live Issues in Engineering Education," which elsewhere appears in this issue. There is in it no note of criticism for Technology, nor, indeed, for any institution, but there courses throughout it a certain challenging spirit which should be rousing to anyone engaged in the difficult task of teaching the engineering idea how to shoot. Mr. Wickenden appears in the happy guise of the "quizzical, physical prof."

A technical school, like a medical school, finds itself forced to share most of its teachers with the extra-academic world. Freshness of view, breadth of knowledge and fertility of concept do not come to the teacher of engineering who sits by the fire and spins. He must venture to design a turbine or two on his own account, discover a by-path in a process of industrial chemistry, or devise a new radio hook-up before he can tell his classes, with much authority, how these things should be done. For reasons not always unselfish, he has not been slow to accept this responsibility.

Disadvantages inevitably follow the advantages of this arrangement. Foremost among them is the natural tendency to distribute efforts in direct ratio to financial gains. The professor finds that his *alter ego*, the consultant, is the financial mainstay of the family, whereupon the professor becomes slightly more

perfunctory in his duties to the school. Not much; nothing immediately noticeable. . . . But the trouble is that the first things to be dismissed from the average professor's mind are those large, bulky questions which concern themselves with the very basis of technical education. No formula serves for them; a clever trick will not solve them; they yield themselves only (if at all) to that unhurried speculation for which he has, no longer, time. They take up too much room in a mind in which space is at a premium.

Therein, perhaps, lies the reason why Technology is, at the present time, insufficiently concerned with the issues of engineering education. Industrial contacts bring home more and more to the professor the needs of industry which should be filled by engineering graduates, and the demands which industry will make upon them; but these same contacts, by their very profusion, distract the professor from the problems of how his individual subject can most effectively be taught and how it can best be fitted into the educational scheme of things. Grasping the need is but half the professors' responsibility; the other half is the devising of a workmanlike method by which the student shall be shaped to fit the need. At Technology we forget the second specification too often. There is too little inspiration, too little ingenuity, even, in our teaching methods. We place our reliance too much upon laboratories which, however excellent, are only accessories to teaching.

And what about the whole bewildering problem of the future educational path that Technology is to take? It would be well to think of that now and then. Some of us do; others of us, we venture, realize not at all the turmoil in the present day educational world of ideas. Are we attempting the impossible in our effort to make a graduate engineer of a high school senior in four years' time? Should we cease the attempt and lengthen the curriculum to five years, or six? Should we close our doors to any but the holders of a bachelor's degree in a college of arts and sciences? Should we establish a graduate school separate in function and administration from the rest of the Institute? Should we acknowledge the dizzy mounting complexity of engineering activity by increasing the specialization of our Courses of Study, or should we incline to let the simpler problems of the material universe take care of themselves and increase our efforts to solidify the young engineer's ability to deal with the stubborn human soul of the world—an ability which with deplorable regularity we discover he does not possess?

There can be no immediate answer to these problems, so simple of statement, so complex of solution. Yet most certainly it is not farsighted to wait until events force us into a dilemma from which there is no satisfactory escape. Mr. Wickenden's article will prove of the greatest value if it will but cause a few of us to pull ourselves up and take thought, for a moment, of the future for the education in which we deal.



# Live Issues in Engineering Education

*A preliminary statement of some of the major problems of technical instruction*

It would be difficult to discover any field of human effort in which enthusiasm and dissatisfaction are as strangely mingled as in educational life in America. With all our vast educational machinery, our rapidly mounting financial outlay and the unparalleled enrollment in schools of every grade, no one feels confident that educational results are keeping pace with the advance of knowledge and the moral stresses of an increasingly complex life. Progress is hard to measure and bids fair to remain so until we can evolve a more trustworthy scale and instrument by which to compare educational results with the potentialities of human beings.

Educational discontent among engineers gains force from their critical and quantitative habits of thinking. Whenever interest begins to lag in a gathering of engineers, a sure means of reviving it is to start a discussion of engineering education. This attitude of friendly criticism has helped to save engineering educators from complacency and has stimulated an unusual degree of initiative in the study of their distinctive problems. Over thirty years ago they formed the Society for the Promotion of Engineering Education, the pioneer organization concerned with a particular field of higher education. In later years when the great educational foundations undertook the critical scrutiny of other fields of professional education, the engineering societies got together voluntarily and undertook a similar study of engineering education.

Finding this task to be beyond their financial resources, this group of societies suggested to the Carnegie Foundation for the Advancement of Teaching that it take over the problem. After due examination of the project, the Foundation generously acceded to the request and finally selected Dr. Charles R. Mann to make an extended investigation and report.

Dr. Mann's report uncovered some positive defects and suggested many possibilities of improvement in engineering education. The general structure was found to be sound and free from radical faults which might call for sweeping demolition and rebuilding, such as had been shown to exist in medical education. The report made its appearance at a time of extreme unsettlement, due to the concentration of all national resources on war effort. Colleges were converted into special mobilization centers, entrance requirements were relaxed, educational aims went into the background and students lived under military discipline of a distracting type. Teaching forces were decimated by withdrawals and struggled under heavy overloads.

The return of peace brought a tidal wave of students, many of them poorly prepared, and the deadly reaction from overstrained morale. Costs went up amazingly and hampered the rehabilitation of the teaching forces. In these troubled times, old routines and traditions were broken up and a chance was gained to try out some of the plans urged by Dr. Mann, but in the main, practices settled back into the pre-war forms. Progress was made in details, but the broader problem remained as before, plus all the added complications arising from the war. A broad movement forward, however, had to wait for the arrival of "normalcy," which refused to be hurried.

Two years ago the Society for the Promotion of Engineering Education, finding a strong sentiment favorable to further investigation and a possible ad-

By WILLIAM E. WICKENDEN  
*Director of Investigations, Society for  
the Promotion of Engineering Education*

vance movement, again took the initiative toward such action. A careful study of the situation by this Society led to the conclusion that the most promising plan was one involving a cooperative investigation by the colleges themselves; to be closely coordinated with related inquiries fostered by the industries, the professional societies, educational organizations and public bureaus and boards of education. For the guidance of this program, the Society created a semi-permanent Board of Investigation and Coordination, which was directed to seek financial support from outside the Society and to appoint a Director and staff to give their entire effort to the project, as soon as resources were available.

There was no precedent for an educational survey on such broadly cooperative lines. In earlier projects the responsibility had been placed on selected individuals responsible to some one of the educational foundations. The request that funds be provided for a cooperative study of engineering education, to be carried out in large measure by the colleges themselves, was closely studied by the great foundations. The acceptance of the plan proposed by the Carnegie Corporation, which has generously provided financial support for an initial period of three years, is a marked tribute to the record of engineers and engineering educators in educational pioneering. An important part in these negotiations was taken by Professor D. C. Jackson, of Technology, who is a member of the above-named Board.

The plan of procedure contemplates the establishment of local committees of survey and investigation in a representative group of the engineering colleges, each of which will be guided by local interest and local resources in its inquiries, but which will contribute to the common pool, evidence which lies within the scope of a comprehensive outline. The Director under the guidance of the Board of Investigation and Coordination is to develop this outline, make suggestions to local committees, coordinate their findings and correlate them with the investigations of outside bodies, and carry on related studies in educational practice in other fields and in the more advanced nations abroad.

The question is often raised as to how far this movement may be expected to go in the direction of standardization. The answer depends entirely on the logic of the evidence to be collected. It is a safe principle of action to recognize that engineering colleges are wholly autonomous and that each must plan and carry out its own program of development. No one dreams of setting up a bureaucracy to evolve and promote a standardized program. In other fields of education the pressure toward standardization appears to come from the professional societies rather than the schools. It is recognized, however, that an organized and cooperative procedure may assemble and make available to the colleges a far more comprehensive body of evidence on their problems than any one institution could provide for itself. Coordinated effort with agencies outside the schools should yield a far more authoritative consensus of judgment from professional and industrial groups and a nearer approach to an adequate survey of occupational demands than has yet been undertaken. Present indications point to an increasing differentiation of function and method among engineering colleges rather than closer standardization to type.

During the past three months the writer has been engaged in a series of conferences with engineering faculties and with professional and industrial groups in an endeavor to ascertain what the live issues in engineering education are. In the background of all minds are the common problems of what to teach and how to teach it, but the answers appear to hinge on other questions requiring previous study.

There is the problem of how to get the right kind of young men into engineering colleges. This is a problem of both attraction and selection. The grounds on which young men choose to enter an engineering college and to pursue a particular course of study appear to be almost pathetically meagre. Parents, high school teachers and others who are called upon for vocational or educational guidance, appear to be very inadequately informed about the duties and activities of engineering, the opportunities it opens up and the exactions it makes in the realms of body, mind and character. There is some evidence that young men of high promise are being counselled to avoid engineering and that it is represented as socially inferior to other educational programs and more likely to lead to routine jobs. On the other hand, there is a dearth of selective devices by which aptitude for engineering training and achievement may be detected or measured.

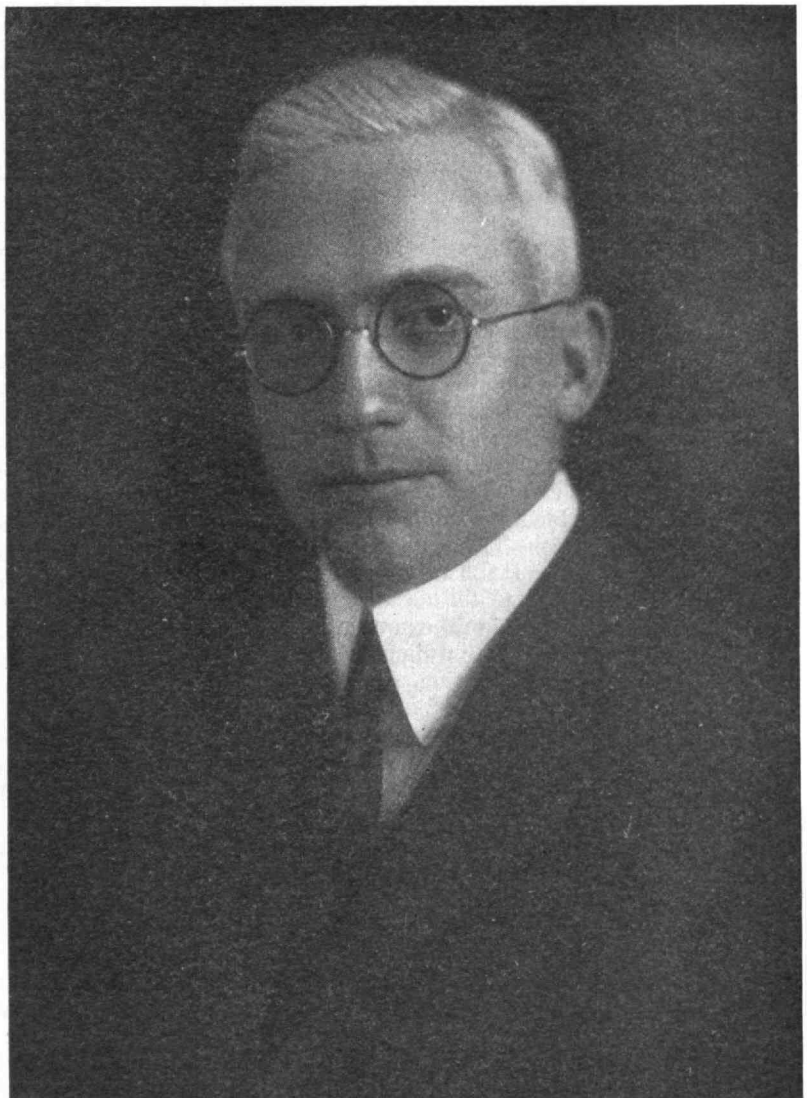
The relatively high mortality in engineering courses tends to cast a great deal of doubt over the present standards of selection and admission. Taking the country as a whole, it seems probable that not more than forty per cent of the men admitted to engineering colleges complete the courses and are granted degrees. In some quarters, particularly the Middle West, there is an undercurrent of feeling that a slow deterioration is going on in the student material. Eastern institutions with greater freedom to select their student bodies make more optimistic reports.

The large mortality referred to seems to indicate that perhaps half of the men admitted to engineering colleges could better be served by some other educational plan. There is a great dearth of specialized vocational schools intermediate between high schools and four-year colleges in the American scheme of education. The tax-supported colleges are giving serious thought to the proper means of providing such training. Probably industry should do more of it than at present. Junior colleges in city school systems are attempting it in some sections. Past experience seems to be against the plan of providing such training in institutions with four-year courses, but there is an oft-recurring proposal to organize engineering courses in two stages, and to make eligibility to the upper stage rest on more exacting tests than are now commonly applied between the second and third years.

At the other end of the scale, there appears to be a growing demand for more advanced professional training for a highly selected group of men. It is not clear that this advanced training should largely take the form of the usual post-graduate courses, which extend the period of college residence to five, six or seven years. \* Such training has been very fruitful in developing men for research and teaching positions and for the more individualized expert

positions in industry, but there is much question whether it is suitable for men who ought to follow the supervisory line positions rather than the expert staff positions in active life. Various adaptations of the cooperative principle of alternate periods of work and study and of the extension principle by which educational facilities are brought to men at their jobs are being tried out with graduates who have established themselves in active life and have discovered educational needs in advanced and specialized fields. Such plans are favorable to the development, at favorably situated institutions, of specialized centers of advanced training and research at which a high degree of cooperation from the industries can be developed. With the multiplication of such facilities for advanced training, especially where they are available to men in active life, much of the pressure toward specialization in undergraduate curricula might be relieved.

What numbers of men the engineering colleges should be training is a question of universal interest. No one organization has a wide enough touch with the problem to formulate an adequate specification. The National Industrial Conference Board is fostering a survey along this line among a number of important groups in the



WILLIAM E. WICKENDEN

*Former Associate Professor of Electrical Engineering at the Institute, and now Director of Investigations, Society for the Promotion of Engineering Education*



manufacturing field. The American Railway Engineering Association and the large public utility groups are studying the matter in their respective fields. The field of highway transport has also received much attention.

A survey of occupational demands must necessarily be piecemeal and a matter of gradual accretion. The conduct of such studies is fairly certain to stimulate important sections of industry, which have been dormant toward technological progress, to an active search for trained men. Such action is certain to increase demand, and through competition, to improve the terms on which graduates may market their services. Employers may well be stimulated to a closer study of the utilization of engineering graduates and to means of accelerating their progress by training and early try-out under responsibility. Better use of the present number of graduates, especially in the earlier years, would be equivalent to an increase in the supply. Colleges, too, are likely to concentrate their efforts on "good risks" and to increase the output from present facilities by reducing student mortality. Only when such possibilities have been fully considered would we be justified in urging an increase in educational facilities on a large scale.

There is a wide awakening to the need of individualizing our teaching processes, so that gifted men may work nearer to capacity, slow-moving men may have a fairer chance to do honest and thorough work, and all grades of men may be led to assume more initiative for their training. There is a general desire to create a wholesome spirit of emulation into the intellectual work of the colleges, and equally, to work out a better valuation of the education to be had from participation in student activities. There is also a general interest in the possibility of establishing a diagnostic clinic to which students who are falling below standards may be sent for expert individual examination, with a view to locating any remediable difficulties before considering suspension or exclusion.

The problem of the supply of engineering teachers, while less acute than a few years ago, remains a universal problem. It is partly a matter of salaries, but in no small degree a matter of status, of contact with professional life, and of avoiding dry-rot. In strong institutions, teaching salaries compare fairly well with the average salaries earned in active life by engineering graduates. Non-financial incentives and opportunities for other professional earnings are relied upon to make teaching positions attractive to superior men. Limited service facilities, immersion in detail duties, the geographical isolation of many of the colleges, the vast development of research and expert functions in industry, and the continual pressing of practice on the boundaries of theory, make it increasingly difficult for a young man to enter upon a teaching career and gradually establish himself as a recognized and expert authority. On the other hand, the importation of

eminent practitioners to fill major professorships has its serious risks and limitations, and seriously discourages young men from entering the junior ranks of the profession.

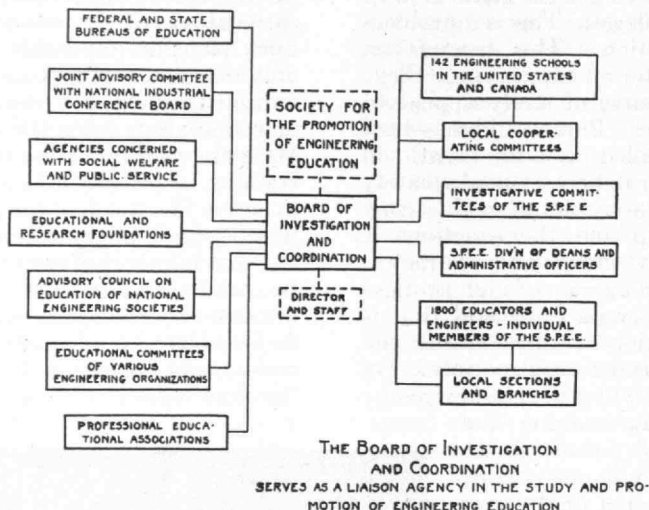
The question of costs in engineering education is becoming daily more pressing. When engineering schools come into competition with other schools, such as those dealing with business administration, in ap-

peals for increased support, they are expected to assume the burden of proof growing out of their high unit costs. The propriety of giving such an expensive form of education to so many men of commonplace gifts is being questioned by more than one college executive. The same principle applies to various subjects of instruction, particularly where expensive equipment is used in the teaching of few men or for very brief periods. There is a tendency toward conservatism in duplicating the costly facilities possessed by other institutions.

Everywhere the question of who should bear the costs of engineering training is being discussed. The average plant investment per engineering student is several thousand dollars, and the annual outlay, exclusive of interest and depreciation, averages \$500.00 or more, and is nearly double this sum in a number of institutions. Should these costs be borne by the state, the individual student, the employing industries, or by private benefaction? Technology is not alone in its discussion of the balancing of budgets. It is worthy of note that the pioneer institution operating on the cooperative plan and in many ways the most successful, the University of Cincinnati, makes a close approach to balancing current expenses with income from fees.

The list of live issues could be extended indefinitely: how to appraise student activities and best capitalize their educational values; how to make the research work of teachers and advanced students most effective as an educational force among undergraduates; how to capitalize to the full the industrial and economic environments of the several institutions; how to make the influence of great professional societies most effective; how to make young engineers more competent to deal with problems of human behavior; how far management as an art or a science can be taught; how to make engineering courses exacting without making them merely laborious; how to present to engineering students a more adequate conception of the avenues and rates of professional progress which will be open to them; how to convince the American public at large of the possible gains to be had by entrusting the planning and execution of public works to engineers instead of politicians; — these will serve as examples.

The significant thing is that the entire engineering profession is voluntarily lining up for the attack on its distinctive educational problems. It is hardly conceivable that Technology men as a group would be content to stand by as mere spectators, and see any such movement gain considerable headway.



# The Swope Proposal: A Symposium

*An approved statement of the Swope Tuition Proposal, and comments on it  
from eleven members of the Alumni Council*

At the One Hundred and Second Meeting of the Alumni Council on January 11, 1924, Mr. Gerard Swope, President of the General Electric Company, presented to the gathering a new plan for educational finance as it concerns the payment of tuition. The plan is so simple, and at the Council Meeting was so provocative of discussion, that The Review believes its readers will be interested in following the exposition of it and in reviewing the comments made on it by a number of Institute alumni.

Essentially, Mr. Swope's proposal is gradually to raise the tuition fees from their disproportionately low figure of \$300 to a figure somewhat more commensurate with the actual cost of educating the individual student. In order to work no hardship upon that portion of undergraduates who would not be able to meet any increase in charges, he proposed that all students may apply for financial assistance to a committee, and that the committee should then set an equitable sum for tuition, which the student might pay in cash, and accept the student's note for the balance—to be paid at such future time as the student found himself able to do without discomfort. It would be the distinct understanding between the student and the Institute that this note was a moral and not a legal obligation.

The virtues of this plan would, in Mr. Swope's opinion, be many. The disadvantages, he also realized, might be considerable, and he hoped that future discussion would bring them out. There was a great necessity, he thought, for some workable plan by which the Institute might find available a greater income than at present it has, without the necessity of asking too often for large contributions from individual wealthy men, and from the alumni body at large. At present, no more than 50% of the actual out-of-pocket expense which the Institute makes on behalf of its students is met by the tuition charge. The consequent necessity for meeting the balance, and for meeting the many capital charges incident to the operation of its complex plant, made it difficult for the Institute to do two highly important things: first, to keep all laboratories and other facilities in a constantly up-to-date condition, and to expand them, from time to time, as further developments arose; second, to pay salaries to the Faculty of sufficient size to hold at Technology teachers and investigators of the highest class, and to attract to Technology men of high reputation and achievement who are often forced out of academic work by the low financial return which obtains in it. If Technology is to remain in the forefront of technical education, it seemed to Mr. Swope vital that these two necessities be squarely faced and adequately met.

From the standpoint of relation between the Institute and its undergraduates, Mr. Swope also saw bene-

fits in the idea. For one thing, the investigations of the committee in charge of such a project would throw much light upon the character and the ability of students applying for permission to pay less than the full amount of the tuition. It would furnish an Admissions Committee with a natural method of examination, likewise, into the personality of the student and his likelihood of success in the professional fields for which Technology trains men.

Probably, Mr. Swope thought, a large proportion of the Institute's students could pay an increased tuition fee, thus removing a burden which now absorbs a large part of the income from endowment funds. There is a present yearly excess of expenditures over income from students amounting to about \$900,000 per year. Payments from students who pay the full amount of the increased tuition would materially reduce this figure, and even if no more than 50% of the students who gave notes for amounts they did not immediately pay eventually reimbursed the Institute, the increase in income would be highly beneficial.

Mr. Swope assured the Council that he thought the present ideas of scholarships for meritorious students, and the idea of loan funds, such as the Rogers Fund, were both distinctly good. The Institute, he thought, might still continue to ask wealthy men to underwrite such funds, but if the new plan operated successfully, this would not be essential.

Mr. Swope cited examples of other institutions in which the tuition is higher, and where considerable loan funds have been available, and statistics have shown that over 90% of all loans to these students have been repaid. He saw no reason why the percentage of Technology men who eventually discharge the obligations they might incur, might not be of a similar size. Even if it were not, he said, it would at least make it more likely that parents of students at the Institute who could afford to pay more for their son's education would do so.

In presenting his plan to the Council, Mr. Swope gave the assurance that he held no brief for it if discussion revealed any serious disadvantages. He preferred himself to speak of it not so much as an idea as a "half-baked thought." It was with the idea of obtaining criticism from all angles that he divulged it to the Alumni Council. At this meeting, the discussion of the plan lasted for close to two hours, and many interesting points concerning it were raised. Below, The Review presents the comment of a number of alumni to whom the plan was submitted at the council meeting. It is to be hoped that this will prove only the beginning of discussion upon a highly interesting topic.

*The Editors.*

## Alumni Comment

### SEVEN QUESTIONS FOR STUDY

It is easy to wax enthusiastic over Mr. Swope's plan. It presents a method whereby the student of today obligates himself to pay all the expenses of his education. In this respect, it is in sharp contrast with existing methods where a material part of the cost of a student's education is paid by others: in the case of State institutions by the State; in the case of

endowed institutions by voluntary contributions from either the Alumni (largely the more successful Alumni) or from those of wealth who see fit to become patrons of education.

It is equally easy to condemn the plan and to cite objections. Some may object to the principle. Others may be influenced by the exigencies of the situation. It is hard to visualize the working of the plan without



being influenced by real or imaginary objections centering around its effect upon the finances of the Institute and the ultimate structure of the student body. To my mind the problem is not susceptible to intelligent study by either an individual or by a committee until it has been thoroughly analyzed into its component parts and until statistical investigations have supplied necessary data.

Only thorough study, by a capable man devoting himself heart and soul to the problem, can give data with which to answer intelligently questions such as:

- a. Would such a scheme make Technology largely a graduate school?
- b. Do fathers who govern the choice of schools for their boys value a Technology education sufficiently to ask their boys to go into debt for it?
- c. Would this plan attract more "well-to-do" students?
- d. What additional scholarships would be necessary in order not to eliminate men of the type now working their way through Technology?
- e. Are other technical institutions prepared to follow the lead of Technology?
- f. Would such a move result in the establishment of a competitive State institution?
- g. What is the relation between the number of students in distant States attending Technology, and the number of students from distant States attending other technical schools such as Stevens, Michigan, Wisconsin, Carnegie Tech, and the like? Such a study might give an inkling of the likelihood of the proposed change diverting students to other schools.

There are many points to be considered. I believe that intelligent consideration must be based upon accurate data and that these data must be carefully tabulated and logically presented. The scheme hits at the heart of a basic question. It deserves careful study.

*Bradley Dewey, '09*  
*North Cambridge, Mass.*

### EDUCATION ON A HIGHER PLANE

The primary advantage of the Swope Plan, assuming that it would bring a large increase in annual income would be the power thus obtained to secure and hold in the instructing force, leaders of unusual ability in teaching and inspiring such men as Technology desires to produce. A great school can only be sustained by great teachers, and teaching must be interpreted broadly and include the ability to show men how to investigate problems of today in that thorough way which will bring out the facts and enable men, from the information thus obtained, to draw the right conclusions. Industry finds men of special capacity for each problem essential to the largest growth and pays for such service. Education ought to be able to command similar talent. Additional funds would also permit securing that equipment so important in the conduct of a technical institution today. A special point of the plan is that it would tap a source of income not now drawn upon in any regular or systematic way.

A considerable number of students could pay larger tuition fees without serious inconvenience and it seems reasonable to obtain this added income. For a rather large percentage of the undergraduates, increased tuition could only be met through some outside help. It may be desirable that higher education should not be made too easy but should be confined primarily to men who have the strength and determination to over-

come some difficulties in obtaining it. In general, we value most those things which we have to work hardest to obtain. Ability and character, however — not financial resources — should be the determining features. An important objection to the plan is the considerable financial burden which would confront many of the men as they graduated.

I think an appreciable increase in tuition could be made if brought about somewhat gradually and coupled with a sufficient loan fund to meet all reasonable demands. It would further seem necessary to have considerable ability to grant direct scholarships, not involving the obligation to return the help given, in order to give every opportunity to men of ability and promise to obtain higher education without incurring obligations which would appear too serious a handicap to a young man looking eagerly for education from the standpoint of very restricted circumstances.

The effect of higher tuition would undoubtedly be to reduce the registration but this could, in part, be overcome by maintaining the instruction and other facilities offered at so high a grade that they could only be duplicated in a few institutions having unusually large resources. Further, there is already considerable feeling in some other educational institutions that the tuition ought to pay a larger part of the cost of the education given so that there is some probability that a plan of this kind, if once started, would meet with somewhat general approval and perhaps adoption. This would, in part at least, remove the danger that the registration might drop unduly on account of the ability to get good, if not equal, educational advantages at a much less cost.

If such a plan were in satisfactory operation the effect upon men contemplating larger gifts would be likely to be favorable because of the sounder business basis upon which it would put our educational institutions and the feeling that they did draw reasonably from every available source of income.

*Edward V. French, '89*  
*185 Franklin Street, Boston.*

### FIVE POINTS OF CRITICISM

Mr. Swope's proposition reduced to its simplest terms means that the larger part of the men graduating from Technology would do so with an indebtedness of from \$1000 to \$2000, probably more nearly the latter figure. This would be a moral and not a legal obligation. As I see it the honest student, to whom a moral obligation would be as binding as one of legal weight, would go to some other institution, as he would be unwilling to mortgage his future to so great an extent.

I come in close contact with a number of students who are borrowing money to meet a portion of their college expenses. With the reaction that I find in these young men toward the burden of obligation of sums of money far less than that contemplated, I feel, as I stated above, that the really honest man would go elsewhere. On the other hand, the man with a less nice sense of the ethics of the situation would not hesitate to avail himself of this opportunity with no thought of repaying his balance. Naturally, this is speculative on my part, but there is at least as ample a warrant for it as for Mr. Swope's optimism.

Secondly, suppose the plan should go through and be a success in the sense that an appreciable number of men would meet their obligations. I feel that I belong to the older generation who see in an educational

institution something that carries more than a mere trade school affiliation. I question if men who had been called upon to pay the last farthing of the expense incurred in their education would in their later years demonstrate that same warm and genial generosity toward the institution that is now so universally a practice.

Again, if the Institute were demonstrably operating on a cost basis I feel there would be little or no incentive to the outside man of wealth to make donations. If the Institute were to need extra funds for that equipment, building and expansion which would always be necessary, it could be met only by this form of contribution or by placing a still heavier burden on the already over-burdened student.

One highly important point lies in the proposed distribution of additional funds potentially accruing from this plan. Mr. Swope suggests that the \$900,000 per year could be used toward paying more liberal salaries to members of the instructing staff, thereby attracting men of high reputation and achievement. This involves a very interesting academic problem and one concerning which frankly there are two opinions. If the experience of other educational institutions in this country may be a criterion, then the payment of increased salaries to members of the instructing staff would inevitably carry with it a proviso that they become full time men. While it is recognized as a desirable principle that men engaged in teaching pure science should devote their time to teaching and to the research which is the professional practice of their specialty, there exists a grave question in the mind of many whether this rule should be applied to men dealing with the applied sciences. In the Medical School, for example, while certain institutions employ full-time clinical teachers, a great many of them believe that the clinical teachers should also be in the active practice of their profession if they are to give to the student of their best. This is equally or even more true in the engineering field.

At the present time, Technology has on its staff of instructors a group of highly competent, skillful practitioners of the various arts and applied sciences of engineering. These men are also loyal and devoted to the interest of the Institute. With the freedom which now obtains to carry consulting work as well as their immediate academic duties, they can without prejudice to themselves and families retain this latter connection which is of indirect value to them in their consulting work. Let the possibility of consulting work be removed and the majority of these men would be obliged to seek other employment. Now, simple arithmetic shows that the division of even the sum which Mr. Swope suggests would not produce any really material increase in the salaries paid. It would place them at a somewhat higher level than other institutions, but it would not bring salaries into competition with those obtainable in industrial employment. This condition would operate in only one direction, namely to render teaching positions at the Institute highly attractive for the mediocre man who could not earn more as a professional practitioner, and no more intrinsically attractive to the man whom it is desired to retain.

It may be said that all of the above is purely speculative, that it is all subjunctive and that there is no sound warrant for the conclusions drawn. Equally one could reply that the same criticism could be applied to Mr. Swope's plan. This is certainly as un-

supported by the comprehensive data of observation and experiment as are the conclusions offered.

To summarize, to carry out Mr. Swope's plan would conceivably lower the tone of the student body, cultivate an unethical point of view among the undergraduates, lessen necessary gifts for expansion and development, inhibit the growth of loyalty among the alumni and produce a less competent instructing staff than that at present enjoyed. This is the extreme view. Any one of these, however, coming to fruition would be enough to negative the desirability of the plan.

A. W. Rowe, '01

295 Commonwealth Avenue, Boston, Mass.

### BENEFITS SEEN BY AN EDUCATOR

Mr. Swope has made a proposal which is stimulating to reflection.

If professional education is so desirable as we purport to believe, why should not those who have secured its benefits support it financially or make it self-supporting? Why should it call for aid from those who have not received its benefits? These are queries of non-professional men of large means who generously support valuable human activities that appeal to their sympathies or their intelligences as a consequence of youthful and manhood experience.

What is the answer to such queries? Technology Alumni have done much in support of the Institute, and have thereby proved that most of them admit benefits that they willingly continue to support for the good of others. Mr. Swope adds a proposal for making the project substantially self-supporting, in so flexible a manner that the beneficiaries may make contributions in the way of repayments substantially at the rate that the benefits accrue to them. This is an ideal worthy of the most careful consideration.

The plan will face many difficulties, some due to its very newness and some due to well-known human habits; but the fact that difficulties must be overcome is not of itself a reason to cast a plan aside. Difficulties can be overcome, and the plan deserves the thoughtful scrutiny of Alumni and Faculty to determine its serviceability. A vital thought in that scrutiny is whether we are now producing the maximum benefits for our students for the money expended, and whether we could produce proportionately greater benefits from larger average expenditures per student. The faculty believes that the benefits produced are in keeping with the expenditure — that Technology does properly sustain its reputation of giving a full return to its students. At the same time, we are always seeking means for improvement.

The working of a plan like Mr. Swope's would surely appeal to men of means who make great gifts to education, and it might lead to advantage for Technology in that way. But the real question is whether the additional money would enable the Institute so to improve the professional education of its students (their skill, knowledge, points of view, power of using knowledge), that these same student in after years would profit accordingly in richness of life, creative power and earning power. If this can be assured, then the plan would assuredly prove desirable and helpful to our students. It seems to me that advantages will be found in the plan, if the problem is carefully studied and all difficulties are squarely faced and fairly adjusted.

Dugald C. Jackson  
Room 4-204, M. I. T.



### FROM THE BURSAR'S OFFICE

I am in favor of raising the tuition fee, but not to the net cost of operation per student. This cost for next year will approximate \$660.00.

On the present basis, a student pays, or has paid in his behalf, \$325.00 in tuition and other fees and fines.

For thirty years, up to 1922, the income from students and the academic expense ran along closely together. Since then, the academic expense has *increased* at the rate of \$46,000 per year, and the income from students had *decreased* at the rate of \$56,000 per year. Our next year's Budget shows an expected gap of \$280,000 in these two items, which, of course, must be made up from other income. We are fortunate in that this other income has increased as rapidly as the income from students has decreased, thus making it possible to balance our Budget.

There are two inferences to be drawn from these figures — (1) that the academic expense should be reduced — (2) that the fees should be increased. I believe that if we compare the academic expense here with that of other engineering schools, we will agree that it is the fees that should receive attention.

Assuming 2600 men next year, I believe the tuition fee should be increased to \$425.00 — an actual increase of \$90.00 per man; that this fee should include the Undergraduate Dues, all Laboratory Fees, and all Deficiency and Condition Examination Fees. They are all nuisance taxes. The Late Registration and Late Payment Fees are in another class entirely and should be retained by all means.

Now, as to the effect of this increase. My own belief is that it would have no effect on the registration, unless it would be to increase it. On the other hand, if the fees were increased to \$500-\$600 within a short period, I believe there would be a big drop in students, especially from foreign countries and States outside New England.

If Mr. Swope's Plan were put into operation and became noised about, there would undoubtedly be a scramble from all parts of New England (Boston, particularly) to register here, and sign a Moral Obligation. (I'd hate to think of having to discount a half million or so of Moral Obligations to get through the fiscal year.)

I believe that the Moral Obligation should be avoided entirely and that our loans be placed on a strictly business basis. We should, however, have available a larger amount for such loans, regardless of the increase in our tuition fee.

It has always seemed to me that every contact that a student has at an educational institution should have an educational value, if possible, and a good many people apparently have the idea that the Business Office can contribute nothing in this line. Following this up, if through financial advice, student loans, or otherwise, the Business Office can impress upon a student the seriousness of assuming a business obligation in the form of a note, and the bearing that all this has upon his future credit and character, the work will not have been in vain.

Moral obligations are for individuals, or individual groups — certainly not to be placed at the disposal of the general public. Even Mr. Swope would not care to have the moral obligation of the Massachusetts Institute of Technology covering the purchase of a turbo-generator set placed on his books for the C.P.A.

H. S. Ford, Bursar  
Room 4-110, M.I.T.

### A SUGGESTION ON BEGINNINGS

Mr. Swope's new tuition finance plan attracts great interest because it is a proposal that tends to put education at the Institute on the basis that the student himself meets the cost of the instruction he receives. However, in view of the feeling in this country that education should be as free as possible, I believe any plan which materially increases tuition will cause an unfavorable reaction on the part of prospective students and their parents. News of the fact that the tuition has been increased will travel faster than the news that there has been set up a method of deferred tuition payments. If this plan is put into operation, it would seem that a drop in attendance should be looked for unless adequate steps along lines of proper publicity are taken to prevent it.

Furthermore, the cost of instruction in the freshman and sophomore years at the Institute is much less than it is in the last two years. With increased tuition even with deferred payments, I believe many students now taking the full four year's work at the Institute would, in the interest of economy, take at least the first two year's work elsewhere, and then come to the Institute for the last two year's work only. Also, the proportion of students who take their Bachelor's degree elsewhere and who come to the Institute only for post-graduate professional training would increase. This type of instruction is much more costly than that given in the undergraduate years. These facts would seem to indicate the advisability of a graduated scale of tuition.

Repayments of deferred tuition might be made easier and the returns greater if the student took out a sliding scale payment endowment policy which would mature in five or ten years after graduation. Such payments might be made monthly. This plan, which would make the agreement between the Institute and the student more binding and would inculcate in the student the habit of saving, has advantages as well as disadvantages.

To obtain data for further consideration, I should first find out the per cent of our present students who would have had to defer payments either in whole or in part, and secondly, get information as to the number who believe they would not have attended the Institute if the plan under consideration were now in operation.

I believe Mr. Swope's plan should be considered carefully with the hope, and I believe with the expectation, that it can be made successful.

Robert T. Haslam, '11  
Room 2-131, M. I. T.

### CONTINGENT ENDORSEMENT

I was very favorably impressed by the possibilities of Mr. Gerard Swope's new tuition finance plan for the Institute. There are two objections to it, both of which can be readily overcome if they prove to be real.

The first objection is on the score of raising the tuition to anything like the six or seven hundred dollars which approaches the actual cost of tuition at the Institute. I believe it would be a very great mistake to attempt to ask for payment of such a tuition fee on every ground: first, because it would automatically prevent a great many of our best men from attempting to enter; second, because while the note, on the balance of the tuition is considered a moral and not a legal obligation—in Mr. Swope's words—yet no one should sign such a note without the intention of carrying out the obligation, and the higher the grade of student and parent the less willing they would be to sign a note

for a large amount of money which it might be pretty difficult to meet; third, I believe that the funds which have been given to the Institute in the past have been given with the idea that they should make up for at least a part of the difference between the actual cost and the actual tuition paid. It seems to me that these and other objections which have been liberally voiced by the undergraduates and the Alumni would all disappear if the tuition were raised to four hundred and fifty dollars. Such a sum would mean, from three thousand students, an additional income of three hundred thousand to four hundred and fifty thousand dollars in the end, when all notes are paid, and would, I presume, reach fairly closely the objective of Mr. Swope.

Secondly, I believe it would be a fundamental mistake to treat such notes as having no legal force. I believe it would be better to follow the policy of the Rogers fund, — charge 2% interest on money for a reasonable period of time, then make the notes collectable through a bank at full legal rate of interest. It will always happen that there will be a few cases where the circumstances are such that it would be unwise, unfair, and hard-hearted to enforce collection, and such cases can always be treated on their merits.

If these two objections are fairly met, and if the plans will also provide for a reasonable revolving fund which can be used by the Scholarship Committee to provide funds for payment of the living expenses of promising students (this is the urgent need voiced by Professor Warner of the Scholarship Committee), then I should feel that the Swope plan was most ingenious and satisfactory, and well calculated to meet the needs of the Institute.

Arthur T. Hopkins, '97  
11 Beacon Street, Boston, Mass.

#### FROM A FORMER CHAIRMAN OF THE FACULTY SCHOLARSHIP COMMITTEE

The plan suggested by Mr. Swope seems to me open to two objections: first, a much higher tuition fee would act as a deterrent to a very worthy and desirable class of students, viz., those who must rely mainly on their own earnings; second, I think there would result a tendency toward class distinction in the student body.

Of our present student body, about ten per cent ask for aid in the form of scholarship. The amount available is such that the average award is about \$180. The average expenses of these men who are living away from home, exclusive of tuition, during recent years, has been about \$675 for the school year. Each of these recipients of scholarship aid is given an opportunity to sign a statement to the effect that he will pay back to the Institute the amount which he has received at a time when he can do so without financial embarrassment. About fifty per cent of the recipients sign this statement.

Contact with these men for five years on the Scholarship Committee has led me to believe that there is a fairly large number of students who have a feeling that the community owes them the means for an education, and therefore any loan to such men if placed on a basis of "moral obligation" would never be returned. It would really be an immoral obligation. I believe, therefore, that every loan made to a student should involve a legal obligation, and that we should insist on its repayment.

The present scholarship fund — the income from about one million dollars — ought to suffice for those

cases where a loan would seem to be so much of a handicap that the candidate would forego such an expensive course.

After all, our real question seems to be, How can we tax those who are able, for the assistance of those who are not, and still maintain that democratic spirit which has so generally prevailed in our student body?

W. J. Drisko, '95  
Room 4-244, M. I. T.

#### TO HELP THOSE WHO DESERVE

Mr. Swope's idea of a tuition finance plan which he presented at the Alumni Council Meeting of January 11, is deserving of very careful and thorough study.

The basic fact of the whole student-income-cost situation is that Technology cannot hope to compete with the ever growing list of State Colleges and Universities where technical schooling (not education) can be obtained by practically anyone wishing it for a comparatively nominal sum.

Technology must, on the contrary, I believe, limit the number of its students, maintain its present high standard, charge a proper and adequate tuition for these superior advantages and services, and then help those who deserve and cannot afford such an education, to secure it.

The professional school does not, should not, differ in its ethics of charges from that of the professional man or its graduate. The better the quality of professional service received, the greater the charge for it. Technology can, should and must charge more for the services which it renders.

I believe, with Mr. Swope, that tuition should be increased, slowly, and from year to year: that temporary help should be given, where deserved, to meet the tuition increases, such financial help being an obligation perhaps financial, certainly moral. Those seeking an education at Technology who can afford to pay increased tuition should pay. This makes available help to those who cannot.

Mr. Swope's "idea" is more than an idea; it's a call to find out what Technology can and must do, to "meet competition" — to get and hold the right men and maintain its present premier position.

The above touches only the one fundamental fact of the situation. I know that many viewpoints will bring out all the essentials, and that Technology will, as always, do the right thing, with Mr. Swope's "idea" as a starter.

Frank D. Chase, '00  
720 N. Michigan Avenue, Chicago, Ill.

#### LEGAL VERSUS MORAL OBLIGATIONS

During the discussion which followed the presentation of Mr. Swope's plan, the point was raised as to the desirability of making the student's note a legal obligation. Mr. Swope seemed to think that the proponents of this idea showed a lack of faith in the honesty of their fellow men. Not at all. I do not believe that a student would consider it any slight on his character to have a loan made to him on a business basis. On the contrary, I believe it might give him a little additional self-respect.

Making the note a legal obligation would not make it any more difficult for a man to pay. The terms of payment could be made when the student graduated and could be arranged to fit each individual case. One man might wish to retire a note within five years.



paying a certain sum annually. Another might not wish to start payments until the end of ten years. The advantage to the Institute from such an arrangement would be that it would be known fairly accurately just how much could be expected from the notes each year. Now suppose a man on account of adverse circumstances could not meet the terms of his note. The terms could then be re-written to meet his changed conditions. It is not presumed that the Institute would ever resort to legal action to collect a note.

Many of us will remember that great stress was laid on the fact that pledges to the Educational Endowment Fund were strictly a moral and not a legal obligation. Personally, I wish they had been a legal obligation and that I had given the Institute a bona fide note, against which I was to make yearly payments. If such had been the case, my pledge would now be almost completely paid. As it is, I have the bulk of it to pay this year. I have not evaded my moral obligation in any sense, for I agreed to pay the amount specified within five years and will do so. The point is, that it would have been easier if I had made a definite business agreement with the Institute. I know several younger Alumni who have had a similar experience.

*Frederick Bernard, '17*  
69 Hillside Road Watertown, Mass.

### THE USE OF LOAN FUNDS

It ought not to be right for a student to get an education at half price when he is capable of paying

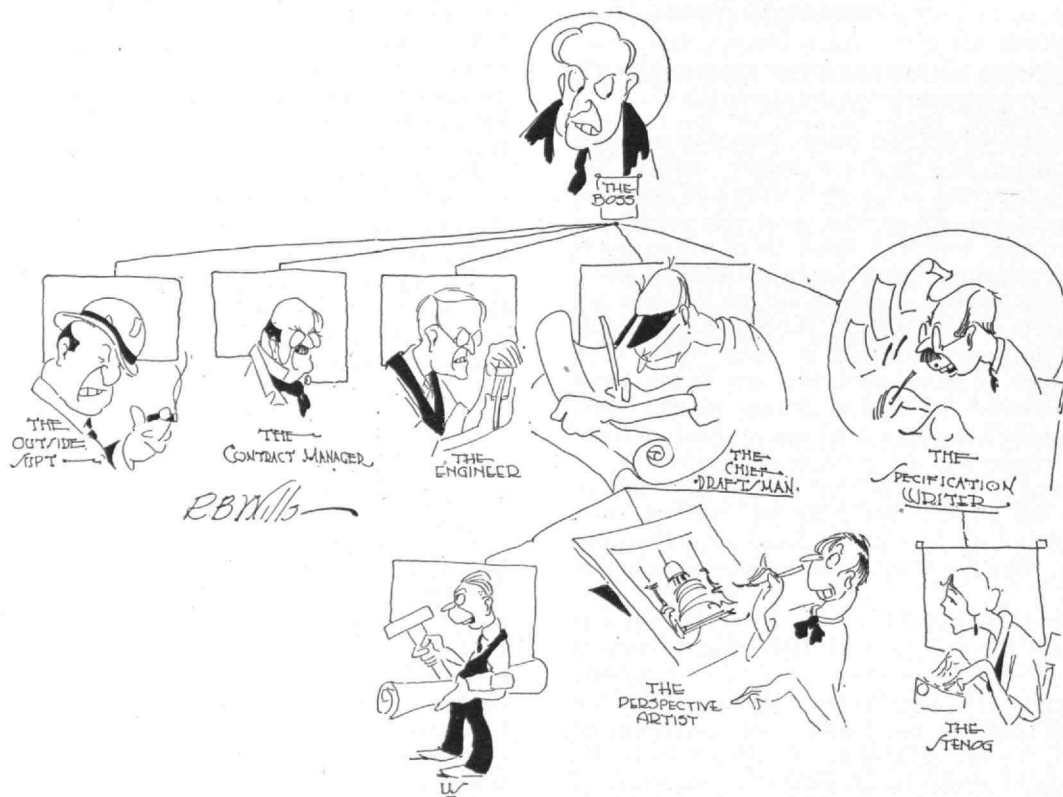
its true cost. On the other hand, a student should not be deprived of an education which will make him an important factor in a community when he is unable to pay its true cost at the time he is being educated.

Mr. Swope's plan is to provide for worthy but poor students who are capable of using to advantage the education offered by Technology. If the right kind of students are chosen to be benefited, a moral loan to be paid when they are financially able will not be a burden to them. A worthy student will have more incentive to do good work if he knows that other people are interested in his education. It might be wise to put a loan fund into the hands of individual trustees interested in Technology who would pay the money to students on the recommendation of the Committee on Admissions. These trustees should take a personal interest in the students and be ready to advise them on matters not connected with their studies.

I believe gifts would be made to such a loan fund, and if by any chance it should become bigger than was necessary for the use of students, a provision could be made to use it for the benefit of the younger and worthy members of the teaching staff.

Those who are responsible for the use of such a fund as proposed by Mr. Swope should have very broad powers of discretion and not be restricted as to the methods used to help worthy students.

*Ingersoll Bowditch, '00*  
111 Devonshire Street, Boston, Mass.



THE ARCHITECT'S OFFICE: AN ORGANIZATION CHART

*From a sketch by R. B. Wills, IV, '18, in Pencil Points*  
Reproduced by permission

# The Ships That Passed

*An account of the life of Arthur Hamilton Clark (1841-1922) and the collection of Marine Prints he bequeathed to the Institute; edited from material in the collection of Mr. Robert J. Clark*

His life reads as if it had been planned by Hermann Melville and Joseph Conrad in collaboration. He went to sea as apprentice at the age of sixteen and he resigned his position as Lloyd's agent for the Port of New York at the age of eighty. And between those ages he was, apparently, always either at sea or doing the business of those who go to sea. As one browses through the unpublished volume collected by his nephew, Robert J. Clark, documented and illustrated with old newspaper prints and clippings, one feels that this American shipmaster is after all only an exemplar of all those American shipmasters who commanded American ships on the Seven Seas in the days before America let sea power slip through her fingers.

But not alone a shipmaster. An oarsman and yachtsman, collector and student and historian of sailing ships and pleasure craft, man of maritime business and long the American representative of the greatest marine insurance agency in the world—Lloyd's of London—his was a long and active life lived fully up to the end in Newburyport only two years ago. He was of Puritan and Boston stock, reared in the old mercantile aristocracy of shipping before the days of industrialism.

The Clark Collection bequeathed by him to the Institute, now on exhibition in the Pratt School of Naval Architecture and Marine Engineering includes, besides models of ships, some twenty-five hundred lithographs, prints and engravings of wooden ships from the earliest times to the era when steam became dominant.

The prints cover in time a period ranging from before the fifteenth century to that of the highest development of the clipper ship and a good many of them were used by Captain Clark to illustrate his own two authoritative works, "The History of Yachting," 1600 to 1815 and "The Clipper Ship Era," 1843 to 1869.

Captain Clark's original classification will give an idea of the extent of the collection: United States war vessels; American steamboats, merchant ships and yachts; British naval vessels, British merchant steam and sailing vessels and yachts; French, Spanish, Dutch and Italian shipping; Dutch yachts; whaling and herring fisheries; pilot boats, privateers, smugglers and slavers; ports and harbors; docks and shipping, portraits and charts. The entire collection has, however,

By ROBERT E. ROGERS  
*Associate Professor of English, M. I. T.*

been newly catalogued and cross-indexed for the use of scholars.

The collection brought together by Captain Clark personally during an active career of over sixty years devoted to seafaring and maritime affairs, in which he became a world-known authority, is of the greatest value not only for its historical value but for its large usefulness in research work in naval construction.

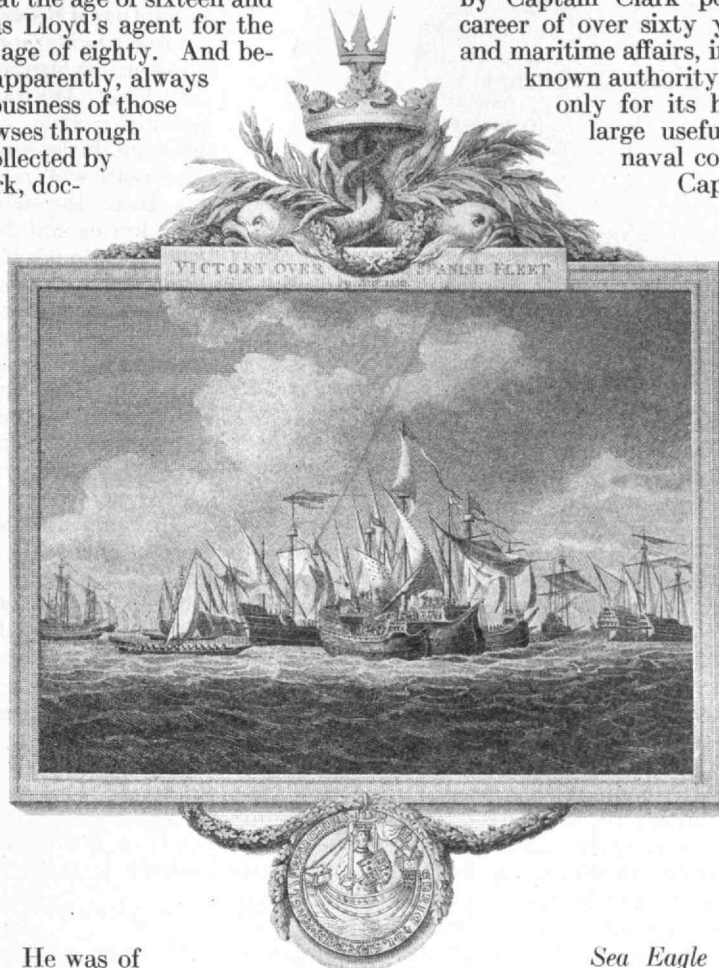
Captain Clark born in Boston, December 27, 1841, the youngest son of the Hon. Benjamin Cutler Clark and Mary Preston Clark, who was a direct descendant of William Preston who came to New England in the *Truelove* in 1635 and was one of the first settlers of Dorchester, and later of New Haven, Connecticut. The father, Benjamin Clark, was founder of the firm of B. C. Clark and Co. of Commercial Street, a well-known house which from 1830 to 1848 was engaged in the West Indian coffee trade and the Mediterranean fruit trade. The firm owned a number of fast clipper brigs and topsail schooners, among them the well-known brigs *Water Witch*, *Pandora*,

*Sea Eagle* and *Silenus* and the ship *Sea Mew*.

Mr. Clark the elder was also an ardent yachtsman and one of the first to build and race yachts around

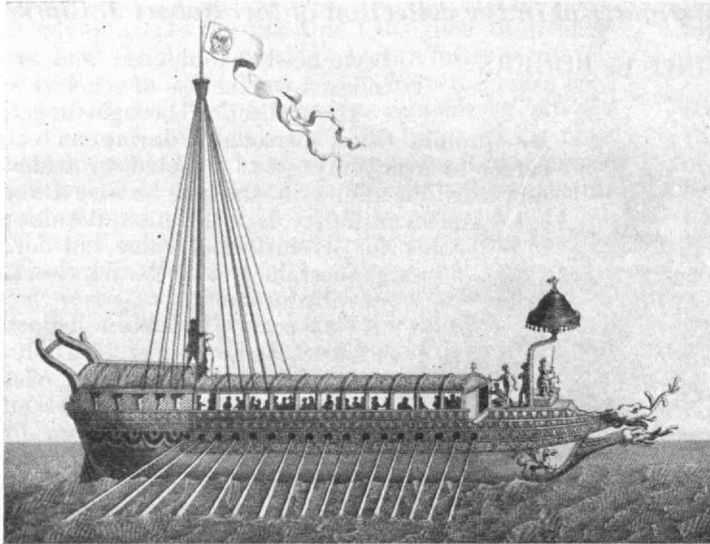
Boston; in 1830 he owned the *Mary*, a half-decked small boat, in 1833 the schooner yacht, *Mermaid*, perhaps the first private decked yacht built around Boston. In 1836 he designed the schooner yacht *Raven* of 12 tons, pilot boat rigged, which in July 19, 1845, won the cup in the first regatta ever sailed in Massachusetts Bay, off Nahant. In 1856 he sold the *Raven* and built the *Young Raven*, somewhat larger, which he owned till his death in 1863. The Clark boy spent his summers at Nahant with his brothers, and all their pleasure and associations centered round the water and boating, which, in addition to his inherited love of the sea, undoubtedly gave him the bent which was to determine his life. He became proficient as a swimmer and in September, 1856, received a medal from the Humane Society of Massachusetts for rescuing E. Lindsay Amory from drowning.

When Arthur Clark was sixteen years old he went to the famous Boston Latin School and while there he rowed on the crew of the *Volant*, a six-oared shell which, on May 16, 1857, defeated the Hurons, a crew largely made up of Harvard Varsity men, on the Charles



*Victory of the English Fleet in 1350 A.D.  
Clevely, del.—R. Rhodes sc.  
Published in London in 1799.*





The first Bucentaur, state barge used by the Doges of Venice in the ceremony of "Wedding Venice to the Adriatic." 827 A.D.

River Course. These were the days of which President Eliot tells us—the days of the first Harvard crew in which he rowed—and it can be seen that Arthur Clark, only a few years younger than Eliot, was in at the beginnings of the sport.

The boy was destined for the shipbuilding business under Donald Mackay, the celebrated shipbuilder, but he was determined to go to sea and the father finally yielded, perhaps in the hope of curing him of his desire. In September, 1857, he left school and on January 19, 1858, he sailed from Boston, as an apprentice on the ship *Black Prince* owned by Bush and Wildes and commanded by Captain Charles H. Brown. On April 2 they rounded the Horn and on July 6 landed in San Francisco, making the voyage in one hundred and seventy-six days. The *Black Prince* then sailed in ballast for Manila, arriving there October 4, after a passage of seventy days. Trade was slack, over a hundred sail lying idle in Manila. The *Black Prince* rested with them until December 9, when she sailed for Hongkong, only to find that harbor in a similar condition. Luck was with them, however, for they got a charter, and on Christmas Day began loading to sail home with a cargo of rice, sugar, ginger, oil and opium. She did not sail, however, until March 14, arriving in San Francisco, May 9. Here Clark left the ship for a brief visit of a month. On his return he was appointed Third Mate, to his great surprise.

On June 19 the *Black Prince* sailed for Hongkong again, making a splendid passage of fifty days. Hongkong was still crowded with idle shipping, but they found a charter in Shanghai and on November 18 sailed from Woosung for New York, with a cargo of tea, arriving there on March 12, 1860. This first voyage of young Clark, which lasted for two years, took him twice to San Fran-

cisco and twice to the East and sent him home Third Mate and an experienced sailor, is worth noting, as it gives *in petto* a representative picture of the carrying trade under sail before the Civil War.

Although it was agreed now what young Clark's profession was to be, his father decided that if he were to become a shipmaster he must have more education in commercial subjects, so for six months Arthur went back to school. He found time, however, to pick up his rowing again and in June, 1860, he won the second Bunker Hill Regatta for lapstreak wherries on the Mystic River in his boat the *Olivia*, doing two miles in 17 minutes and 20 seconds. On June 26 he won the South Boston Regatta in the same boat, doing the same distance better by two minutes, and after finishing this hard race immediately rowed twelve miles to Nahant. On Independence Day he won the Boston City Regatta, doing the two miles in 14 minutes, 27 seconds, beating the record held until then by his own brother Robert F. Clark, one of the noted oarsmen of the day.

But he was too much the deep-water sailor to be content with river rowing, so late in the fall of 1860 he again went to sea, this time as second officer on the ship *Northern Light* under Captain Doane, owned by James Huckins and Son of Boston. Shipping at this time was at a pretty low ebb, the freight rate to San Francisco having fallen from \$60 a ton of a few years before to about \$8.00 a ton.



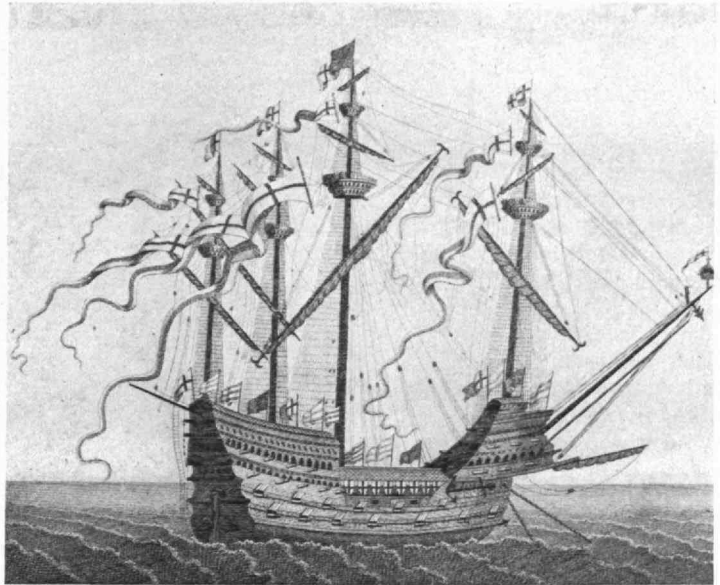
Dutch yacht running before the wind. Etching by Groenewegen 1790 A.D.

Seamen's wages were \$8.00 a month. The *Northern Light* sailed for San Francisco on December 5, 1860, with a miscellaneous cargo, arriving on April 18, and on June 9 left on her return voyage to New York with a cargo of wheat. While in San Francisco they heard the first news of the firing on Fort Sumter, and when off Cape Horn, on the return trip, they bespoke a ship which reported the Civil War under way and warned them to look out for the swarming Confederate privateers. But although many other Yankee ships on the same course were captured and burned, the *Northern Light* reached New York in safety, without adventure, in September.

That autumn young Clark applied for a commission in the Federal Navy but as his application was not accepted he rejoined his ship as the *Black Prince* as First Officer. For a time he was in government service, as the ship was chartered by the government as a troop ship, sailing to Port Royal under Captain Thomas B. Howes. She was also in Butler's expedition to Ship Island. That was all Clark saw of the Civil War, for in July, 1862, the *Black Prince* under Captain Chase sailed for Shanghai, with Clark on board as First Officer. Except for running aground and lying stranded for twelve days off the coast of China the voyage was without incident and they reached Shanghai in January, 1863. Soon after, Clark transferred as Chief Officer to the *J. C. Humphreys*, owned by Thomas Hunt and Company.

That same year he was given first command as Master of the bark *Agnes* and began his ten years service as ship captain in eastern waters. For about a year and a half Captain Clark commanded the *Verena*, owned by Lo Po Yim, a Chinese merchant, sailing out of Bangkok under master's certificate issued by the Siamese government.

In the fall of 1865 he started home, from Singapore to Bengal in P. O. steamers, from Bengal to Suez in



The English ship "Harry Grace à Dieu" that carried Henry VIII to the conference with Francis I on the Field of the Cloth of Gold, 1520 A.D. Original painting by Dominick Serres R.A. hangs in Windsor Castle.

a full rigged brig, and from Alexandria to Marseilles in a sailing ship. He traveled extensively in Egypt and France, visited Paris and London, finally sailing home to Boston in April, 1866, on the *S.S. Europa*. It was during this furlough that he sailed to England in the sloop *Alice*, of which mention will be made later.

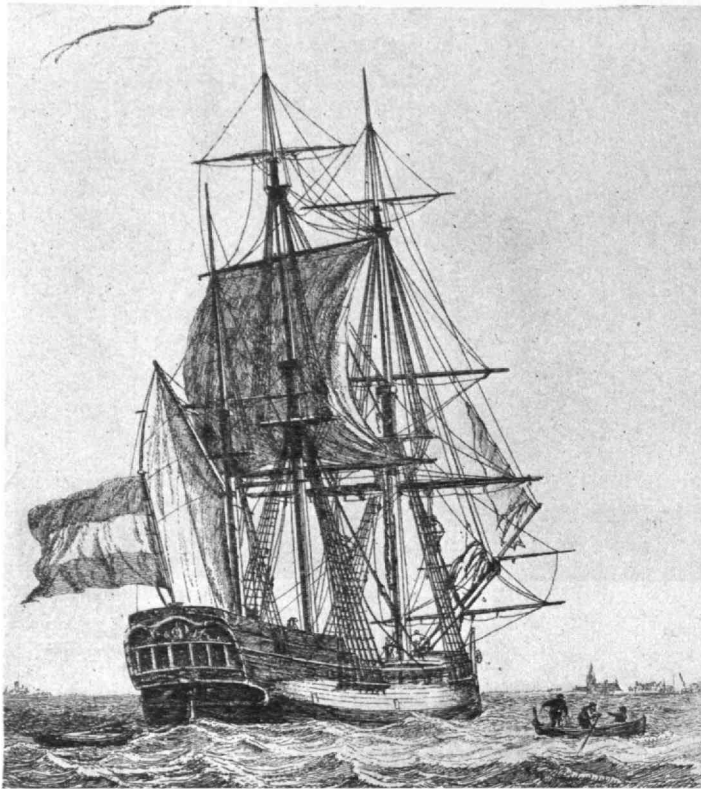
When he was ready to resume work he was engaged by John M. Forbes Co. of Boston to take the *S.S. A. J. Ingersoll* from New York to China. He sailed in his first command under steam on January 23, 1867, and arrived in Hongkong on April 2, eighty-seven steaming days from New York. At Hongkong the ship's name was changed to *Manchu* and she engaged for about a year in the coastwise trade. Later, under another company, Clark sailed her for a year and a half longer between Shanghai and Tientsin. Then he took command of the *S.S. Suwonada*, steam and sail, a rapid ship which had been used by the U. S. government during the war as a dispatch boat. In June, 1869, came Captain Clark's famous exploit in bringing the *Suwonada* in a sinking condition under her own steam from Tong-Ki Rock, where she struck on an uncharted reef to Hongkong, where she sank at the dock. He had kept her afloat with pumps manned for nearly forty-eight hours and for this feat he was presented by the English and American insurance companies with a valuable piece of plate and a testimonial.

But the *Suwonada* seemed to be a hoodoo ship. In January, 1872, while steering through Haitian Straits in mid-channel between Pass and Low Islands, the ship struck heavily on a sunken, uncharted rock. While she was helpless and awaiting assistance, Captain Clark had to fight off a fleet of Chinese pirate junks who swarmed to loot the ship.



The Kent, East Indiaman, afire in the Bay of Biscay. The ship blew up after nearly all the passengers and crew were saved by the Brig Cambria, 1825 A.D.





*Dutch three-master with main top-sail aback.  
Etching by Groenewegen, 1790 A.D.*

Eventually after fighting them off he and his crew were rescued but the ship had to be abandoned as a total loss. In the investigation which followed, Captain Clark was not only exonerated but highly praised for his conduct in the affair.

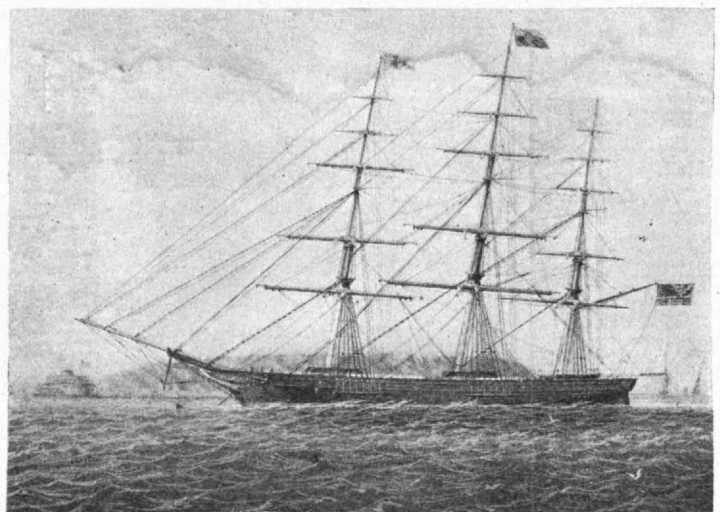
He was given another command by the same company, the *Venus*, but remained with her only a short time, when he resigned and went to Japan on a pleasure trip. For a time he was manager of Pier and Godown of Hongkong, but the company went out of business shortly after. This was his last venture in the East. In August, 1873, he sold all his household effects at auction . . . it is interesting to note that the advertisement of the auction mentions a valuable collection of marine lithographs . . . and returned to the United States.

In 1873 he was given command of the large steamship *Indiana*, one of the four famous ships built by Cramp and Sons of Philadelphia for the American Line. Captain Clark commanded her until 1876, when he resigned to accept a position in London, representing Boston, Philadelphia and New York marine underwriters. The *Indiana* was his last command, as well his finest, and the rest of his active life was spent on shore in marine business. He remained in London for thirteen years. During this time he acted under appointment from the U. S. government as one of the commissioners in the settlement of the *Alabama* claims. He also got out the original estimates and

specifications for Mr. James Gordon Bennett, owner of the *New York Herald*, for what was afterwards known as the Mackay-Bennett Atlantic Cable. Had the sloop *Mayflower* been sent abroad in 1887 to race the English cutter *Arrow*, Captain Clark would have taken her over, but the plan fell through. When Captain Clark returned to America in 1890 he took passage on the *William R. Grace* from Havre to Philadelphia. All went well until September 9, when off Cape May they encountered a hurricane and were obliged to anchor. The anchors, however, would not hold and the ship was driven on the Hen and Chickens Shoal and was a total loss, passengers and crew being rescued by life-savers.

In 1891, Clark opened an office in Boston, as Maritime Agent and Counsellor. This office he conducted until the summer of 1892 when he was invited by the Directors of the World's fair at Chicago to organize their Marine Transportation Department, the position giving him charge of all the pleasure and passenger craft which were to serve the thousands of visitors to the famous White City of 1893. He engaged in this work only about three months, however, then opening an office in Chicago for a time.

In 1895, after a trip to England in which he sailed back the little steam yacht *Sylvia*, Captain Clark received the appointment to the position which was to make him for twenty-five years one of the best known and most influential men in the United States upon maritime affairs. He became agent for Lloyd's for the Port and District of New York, the first American to hold this appointment. When he retired in 1920, at the age of eighty, after a quarter-century of service in this one position, he was given a handsome present and a pension for his long and faithful service. After retiring from active service, Captain Clark moved from Brooklyn to Newburyport, Massachusetts, where



*Speedy U. S. Clipper Ship Nightingale  
built by Samuel Hanscom  
in Portsmouth, N. H., 1852 A.D.  
New York to Melbourne in 75 days.*

he bought a house and lived until his death on July 5, 1922.

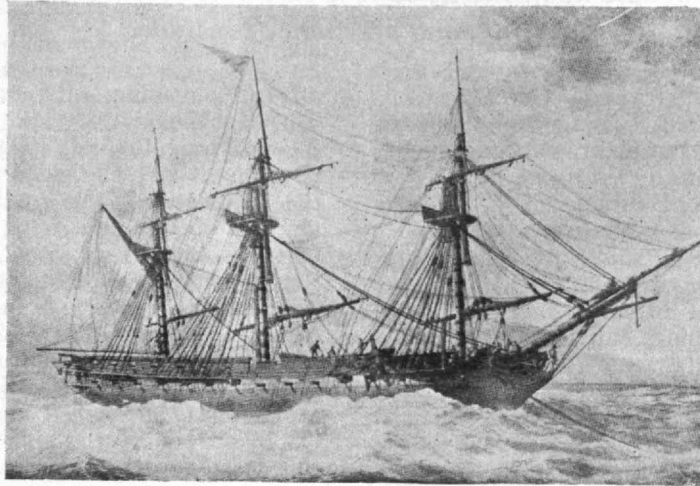
In his long and interesting career as a deep-water sailor, two events are of special interest — interludes, so to speak, in his life as a merchant skipper. In 1865, Captain Clark took a furlough and, after traveling extensively in Egypt and Europe came home. But a vacation wasn't a vacation to him without some sailing, so for sport he took the sloop *Alice* of the New York Yacht Club across the Atlantic in nineteen days. The *Alice*, owned by Thomas Appleton of Boston, was the smallest yacht which up to that time had crossed the Atlantic under regular racing rig. Her length was 48 feet, her tonnage 27 tons. She carried a crew of four besides the master and two passengers. She was named for Miss Alice Longfellow, daughter of the poet, whose brother, Charles A. Longfellow, was a passenger on the voyage. Her arrival at Cowes was made the occasion of much congratulation and entertainment.

Captain Clark's other feat came in 1894 when, with his wife on board and in midwinter, he brought the steam yacht *Sylvia* across the Atlantic in twenty-five

days by way of Madeira and Bermuda. The *Sylvia* was only 130 feet long, the smallest steam yacht which up to that time had made the western passage of the Atlantic, and Captain Clark made the crossing after one captain and crew had abandoned the attempt as impossible.

These are perhaps the two most romantic and characteristic events in the seafaring life of a man whose whole life was given to the service of the sea. His active career bridged the generation of transition from the days when the clipper ship was

queen of the seas to our day when sails are vanishing and giant steamships make time not dreamed of by him in his early days. He commanded under sail, he commanded under steam; thrice his ship sank under him; he fought with Chinese pirates and mutineers; he was a pioneer in rowing and pleasure yachting; he crossed the Atlantic twice with small craft in record time. He wrote two books, and he left behind him this great collection of pictures and models of the ships he loved, for the enjoyment and knowledge of all of us who, too, love the sea and its ships and their history.



THE MYSTERY SHIP

Labelled erroneously as "Old Ironsides," but in reality of unknown ancestry





# The One Hundred and Fifth Meeting of the Council

*The debate upon the By-laws is continued from the previous meeting, and perchance concluded*

The old lullaby ought to be revised. Hereafter, if a Council Member finds himself Tossing from Side to Side into the far reaches of the night, someone might with good effect croon to him

By-law, Baby Bunting,

Gilmore's gone a-hunting

and watch the staring eyes go shut. Morpheus, the guess is, would come with a rush.

Not that the meeting of March 31 provoked to slumber. Oh, no. Many things enlivened it, and not least among them was the recurrent debate upon the Revision of By-laws, but the general effect of it was to bring the Council out by that same door wherein it went. Notwithstanding, the Council covered a lot of ground between entrance and exit.

Absentee landlordism was early noticeable. Mr. Gilmore had gone South, and Mr. Denison had gone West. There are just enough staff officers of the Alumni Association to distribute among the points of the compass, but if you start from Boston there is not much to be seen if you go immediately North or East, and so Alexander Macomber, '07, Vice-President of the Association, stayed at home to preside, and Arthur T. Hopkins, '97, Secretary-Treasurer, sat by the fire and kept the minutes.

Mr. Macomber opened the meeting at 7:50, first stating that a special Nominating Committee on Advisory Council Membership had been appointed with A. W. Rowe, '01, as Chairman. He likewise announced the formation of the Technology Club of Norway, and read a letter (thoughtfully in English) from its Secretary.

Then Mr. Macomber introduced Paul D. Sheeline, '19, who was to speak, as usual, on the New University Club. Mr. Sheeline reported that the option had been taken up and that ground would be broken within several weeks. Technology, he said, had some four hundred and forty members, of which a dozen or so (there seems always to be an Or So in these statistics) were life members.

"All the life members are paid up," quoth Mr. Sheeline, "except two; and the word of these two is probably better than their check." This utterance was historic although none, least of all the speaker, realized it at the time. Solecism was the most that anyone noticed at the moment. Unaware that the knife-edged pendulum had begun to swing, Mr. Sheeline went blithely on. He asked for "ideas" and suggested the possible re-animation of the Technology Club of Boston.

Mr. Hopkins furnished the only idea by saying that Technology men lunched together in Cleveland, Chicago, Detroit and New York, and that, therefore, they ought to in Boston as well. This excited Mr. Sheeline, who urged immediate action so that a Technology room or rooms might be incorporated into the architect's plans. But the Council manifested languor, forcing Mr. Sheeline himself to move that a Committee be appointed to see that Technology men were provided with facilities for lunching together. C. Frank Allen, '72, apparently un-anxious to lunch with anyone, suggested that the idea be referred to the Executive Committee. No one else seemed to care where the next lunch was coming from, and Professor Allen's suggestion ended the episode.

Then came the By-laws. Mr. Macomber began the

affray by reading, with unbelievable eloquence, from The Technology Review, the three hundred and seventh page thereof. That word "reading"; what a poor one it is! The gusto, the fervor, the inflections, the modulations, the double-stops and harmonics — ah, how impossible it is to catch these on the printed page, to mold them into the inflexible type-metal of the Monotype! It is a pity.

Article VI, concerning increase in dues to \$5 for all Alumni whose classes had been graduated for five years or more, first came under discussion. Mr. Macomber stressed the necessity for more Alumni Association funds, and called for discussion. A. F. Bemis, '93, rose to query the ability of the Council to act on the matter with power, since it was provided by Article VIII of these same By-laws, that they might be amended at any time by a majority vote of the full membership of the Council, provided thirty days' notice of amendment had been given through publication in The Technology Review. But this Article itself was shortly to come up for amendment, which was to provide that a direct-mail notice to full membership of the Council might take the place of Review publication. This created complications of the second order and of three cusps, but Mr. Bemis was not disposed to press his point and the rest of the Council, if it understood the discussion, gave no sign. Discussion went on. Ingersoll Bowditch, '00, asked a question concerning expenses, and Merton L. Emerson, '04, made a plea for increased membership in the Association with the question of dues as secondary.

After short contributions by Frank P. Scully, '15, and Bradley Dewey, '09, H. H. Young, '91, cynically suggested that since most good members paid their dues without thinking about it, the dues might be unostentatiously increased, and none might be the wiser. "When we want money for our class treasury," said Mr. Young, "our treasurer sends out notices saying 'This year's dues, \$2; last year's dues, \$2; total, \$4.'" This was a bit too reminiscent of Jeremy Bentham to suit the Council and James P. Munroe, '82, suggested that Mr. Young was wasting his sweetness in Boston, while so many interesting things were happening in the Nation's Capital.

Then Mr. Munroe moved that the change be adopted for publication in The Review. The motion was seconded. A strangled voice from the back of the room said, "But it's been published!", and there was momentary silence. "Yes," said Mr. Macomber, regaining control of the situation, "but now we want the authority."

"Doubtless, this is a good joke," then said Mr. Bemis, "but wha . . . ."

The motion was carried. Let some future historian interpret the event.

The disposition of Article VI brought up the discussion of Article VIII, already mentioned in this report. It proved far less refractory to consideration, and within thirty seconds (thanks to skilful stage-managing by Mr. Macomber) had been moved, seconded and passed.

The meeting then reverted to a consideration of Article I so considerably discussed at the previous meeting. It is this article which concerns the method of nomination for Term Members of the Corporation

of the Institute, and it was the business of the Council to discuss whether or not the proposed change (cutting down the nominees from six to three) should be published in *The Review*, anticipatory of future action.

At this point, Mr. Hopkins requested permission to read a letter from Mr. Gilmore, and, receiving it, did so, as if walking through tar. It became slowly evident that Mr. Gilmore had revised his opinions upon revision, and was no longer in favor of the proposed change, but believed that the number of nominees might better be increased than decreased.

Mr. Bemis once again took the floor, and, by way of beginning his remarks, cut loose the sword of Damocles which had been invisibly dangling above the head of Mr. Sheeline, by announcing proudly that he was one of the two life members of the New University Club "whose word was better than his check." Not quite the entire membership of the Council abandoned itself to paralyzing laughter for several minutes.

When quiet was restored, Mr. Bemis proceeded with a speech once again directed against the proposed change. Upon its conclusion, Dr. Rowe, activated by motives widely different from those of Mr. Bemis, nevertheless moved that the proposed amendment be not published in *The Review*. In the discussion which followed, Mr. Munroe played a dominant part, and stressed the seriousness of the situation concerning the method of fixing on Corporation nominees. He pointed to the disadvantages of nominating three strong men and three weak, and to the invidiousness of nominating six men of equal strength, only three of whom could be successful in election. Since it was impossible that a Nominating Committee could be ever geographically representative and at the same time

capable of gathering a quorum, Mr. Munroe suggested that perhaps a system of cumulative voting was the only solution from the difficulty. At any rate, he moved that the chair appoint a committee to investigate the entire situation. After a considerable discussion, in which E. G. Allen, '00, William Green, '05, Professor Allen, Mr. Emerson and Mr. Bemis took part, the Council first voted down the proposed amendment to Article I and then voted favorably on Mr. Munroe's motion.

With the major business of the evening accomplished the Council at large v. Frederick H. Hunter, '02, staged an interesting catch-as-catch-can for a few moments. Space prohibits a particularization, but it may at least be said that Mr. Hunter hung one on the Gentleman from Minneapolis before his [Mr. Hunter's] motion was laid on the table with a resounding thwack.

For the last few moments of the evening was reserved a considerable thrill. Ralph H. Howes, '03, President of the Technology Club of New York, and Toastmaster at the recent Radio Dinner, came to Boston ostensibly to tell a few interesting details of the affair, but in actuality to say with authority for the first time, that the New York Club was about to launch a campaign for a worthy clubhouse all its own. Since the plans call for a fifteen-story building with two hundred and fifty bedrooms, since New York will need all the help for the Alumni-at-large which it can possibly obtain, since the plan was referred to by Mr. Munroe as the next big thing which Technology must accomplish, you may readily see that this brief history of an incidental event can hope to do no justice to an undertaking which later will merit pages of its own. So, at that, we leave it for the present.



Notman

#### SIX BANKS TO THIS CONSOLE

*This photograph of the Combined Musical Clubs is worthy of reproduction this month, even if our Undergraduate section had to be omitted for lack of space. The Clubs have just concluded another successful season*



# ATHLETICS

## WRESTLING

The defeat of Princeton and the winning of the New England Intercollegiate crown represent the high points of what started as an indifferent season for the Technology wrestling team. The score against Princeton was 21 to 10. The margin at the Intercollegiates held at Providence on March 14 and 15 was closer, Technology's score being 18 with Harvard second at 16 and Brown third at 10. The first returns announced Harvard as the victor at 16 points and the Institute second at 14, but subsequently the press announced the corrected score as given above.

Rockwell Hereford, '24, and William D. Norwood, a graduate student in the Coöperative Course in Electrical Engineering (eligible because the Course VI-A students are not in residence the entire first four years of their course), won the individual championship laurels in the 158 and 135-pound classes respectively.

Hereford, together with several other members of the team, competed subsequently in the Olympic qualifying trials held at the Cambridge Y. M. C. A., March 22. He was successful in winning all his bouts, going through the preliminaries with ease and having but little trouble in disposing of his opponents in the semi-finals and finals. Norwood was not able to com-

pete because of an infected forehead. Morris M. Kurtin, '25, came through all his bouts up to the finals, wrestling in the 123-pound class. The referee's decision favored Sexton of the Springfield Y. M. C. A. College and Kurtin placed second. J. F. Burke, '27, took third in the 174-pound class. These trials were one of a series being conducted throughout the country. The winners of first and second places will go to New York City, May 26, 27, and 28, to compete in the national trials to be held in Madison Square Garden.

Last year, Hereford captained the Institute team and came through the season with but one decision against him. Four of his matches he won by falls and four from decisions. Besides his record of two years of college wrestling without being thrown, he has held the New England amateur title in the 160-pound class for two years. His record for the season just passed is not marred by a single loss, three falls and six decisions being to his credit.

Much of the season's success of the Technology team is attributed to the Coach, "Cyclone" Burns. Burns, whose real name is John Carlson, has been coach here for three seasons, but due to a previous contract with Andover Academy he was able to give only two days a week to his work at the Institute.

## ATHLETIC RESULTS TO APRIL 15

### FENCING

- March 15—U. S. M. A. 13, M. I. T. 4, at West Point.
- March 22—Harvard 10, M. I. T. 3, at Cambridge.
- March 28—Yale 13, M. I. T. 4, at Cambridge.

### GYM

- March 22—M. I. T. 29, Princeton 25, at Cambridge.
- March 28—Intercollegiates: Navy 43, Princeton 8, University of Pennsylvania 7, M. I. T. 5, Dartmouth 0, Yale 0, at Princeton.

### RIFLE SHOOTING

- March 11—University of Pennsylvania 1934, M. I. T. 1882.
- March 14—M. I. T. 1895, Syracuse 1745.
- March 15—Washington State College 938, M. I. T. 920.
- March 15—M. I. T. 991, University of California 980.
- March 18—Pennsylvania State College 1936, M. I. T. 1897.
- March 29—M. I. T. 500, Georgetown University 496.
- March 29—M. I. T. 500, University of New Hampshire defaulted.

Final Standing, Northeastern Intercollegiate Rifle League (each team shot 9 matches winning the number indicated): Norwich, 9; University of Pennsylvania, 8; Columbia, 7; Pennsylvania State College, 6; M. I. T., 5;

Syracuse, 4; Yale, 3; Harvard, 2; Dartmouth, 1; Princeton, 0.

## THE CALENDAR OF FUTURE SPORTS

- May 2 or 3—Crew, Varsity vs. Syracuse University at Syracuse.
- May 3—Tennis, Dartmouth at Cambridge.
- May 3—Track, Princeton at Princeton.
- May 7—Tennis, Harvard Graduate School at Cambridge.
- May 9—Tennis, Princeton at Princeton.
- May 10—Crew, Varsity vs. Cornell at Ithaca; 150-lb. and Jr. Varsity vs. Harvard at Cambridge.
- May 10—Tennis, Stevens Inst. of Technology at Hoboken.
- May 10—Track, Harvard at Tech Field.
- May 14—Tennis, Brown at Providence.
- May 17—Crew, \*Varsity vs. Harvard on the Charles; 150-lb. vs. Columbia at New York.
- May 17—Golf, U. S. M. A. at West Point.
- May 17—Tennis, Wesleyan at Cambridge.
- May 17—Track, U. S. M. A. at West Point.
- May 19 and 21—Tennis, N. E. I. L. T. A. at Boston.
- May 21—Crew, Richards Cup Race for Class Crews on the Charles.
- May 23—Tennis, Yale at Cambridge.
- May 23 and 24—Track, N. E. I. C. A. A. at Tech Field.\*
- May 24—Tennis, Williams at Cambridge.
- May 30 and 31—Track, I. C. A. A. A. at Harvard Stadium.

\*Tentative.

# NEWS FROM THE ALUMNI CLUBS

## THE TECHNOLOGY CLUBS ASSOCIATED

*In connection with announcement of the meeting of the Technology Clubs Associated to be held in Detroit, May 19, 20, 21, the Detroit Technology Association deems it important to continue the account of industries and other engineering features which was begun in April number of The Technology Review.*

Toward the end of the nineteenth century Detroit began to awaken industrially. The population was 250,000. Charlie King was making a horseless carriage in John Taner's machine shop, Henry Ford was making a gas engine to propel a vehicle and the Fisher Body Company was a wagon works. The conditions for industrial growth were favorable in that transportation was unexcelled, although there was some delay in rail transportation from the east, as all railroad traffic had to cross the Detroit River. This difficulty was finally solved by the Detroit River tunnel, one of the great engineering features of the times. The steel casing of this tunnel was fabricated in sections which were made air tight, floated down the river and sunk into position upon a previously prepared bed. Raw materials were cheaply assembled, there was plenty of good labor and these conditions attracted outside industries, notably, The Burroughs Adding Machine Company and the Chicago Pneumatic Tool Company.

A great impetus was given Detroit's industries by the manufacture of automobiles which now form 48% of its finished product. In 1896 Henry Ford developed a two cylinder gas engine, which he attached to a low-hung vehicle running on rubber tires. William C. Maybury formed a company to make the Ford car but was not successful. The same interests, with the Leland Falconer Company formed a new organization which ultimately became the Cadillac Motor Car Company. In 1900 the Olds Company made a one cylinder car, which was a success, and this company was the first in the United States to build a car for the market. Four hundred and eighteen cars were produced the first year. Henry Ford organized the present Ford Motor Company in 1903 and made 672 cars the first year (compare present production of over 7,000 cars per day, with 110,000 men employed in Ford's two Detroit factories). In 1903 the Packard Motor Car Company was organized and others followed in quick succession until at the present time there are manufactured in Detroit the Cadillac, Hudson, Packard, Essex, Ford, Columbia, Paige, Jewett, Studebaker (in part), Detroit Electric, Dodge, Lincoln, Chalmers, Maxwell, Rickenbacker, Hupmobile and Gray. The city contains also Continental Motors Company, Fisher Body Company, Wilson Body Company, besides 165 plants engaged in the manufacture of automobile accessories. Thus, it is easily understood that 65% of the automobiles in the United States are made in Detroit. Tech men are found in important engineering positions in the various plants. These industries are responsible for Detroit's rapid growth; it now has over a million people.

Detroit is in the midst of many engineering features. Perhaps the most important of these is the Great Lakes Waterways. From the head of Lake Superior to Chicago and the lower Lake Erie ports there is a 21-foot

ship channel. This channel, where up-going and down-coming ships pass, is, in its narrowest part, 1,000 feet wide. At three points where this width could not be obtained, two channels were provided, each about 300 feet wide, one around Neebish Island in St. Mary's River, one at the St. Clair Flats and a third at the point where the Detroit River enters Lake Erie. At this point the building of the Livingstone Channel (to be visited on the Boat Trip, May 21) is of great interest to the engineer. A dam was thrown across the American side of the river and the channels cut and dug. These channels together with the five American locks at Sault Ste. Marie, the first of which was opened in 1855, has resulted in the largest water-borne traffic in the world. Traffic on the Detroit River has increased from the early days when the fur trade was carried on by means of dugouts and bark canoes, to the present day, when we find luxuriously appointed side-wheel steamers carrying 4,500 passengers, and steel freighters, over 600 feet long with a capacity of 14,000 tons of ore and 400,000 bushels of wheat. The present tonnage on the Detroit River is greater than combined tonnage of London, New York, Hongkong and Liverpool. Detroit's contribution to the Great Lakes shipping was in the form of Lake freighters and passenger boats built at the yards of The Great Lakes Engineering Company, and The American Shipbuilding Company. Among pleasure and racing craft manufactured in Detroit, the fastest motor boats in the world are made by Gar Wood.

Among the other principal engineering features of Detroit is the Detroit Edison Company, whose maximum load is 302,000 K. W., serving an area of 1,028 square miles and a population over 1,500,000; likewise, the recently completed concrete bridge 2,200 feet long connecting Detroit with Belle Isle, the largest and most beautiful of the city's numerous parks. The Detroit Filtration plant, recently completed, is of special interest to engineers. This plant has eighty 4 M. G. D. units and is the largest in the world.

The manufacture of aeroplanes is also part of Detroit's industrial life. The Stout Company is making all-metal planes and The Air Craft Development Corporation is developing for commercial uses a lighter-than-air rigid airship of all metal construction. Selfridge Field, an army aviation base, is located in the neighborhood.

Of interest to the architect is the General Motors Building, chiefly designed and owned by Tech men, and the largest office building in the world, the Public Library (designed by a Tech man), the twenty-nine story Book-Cadillac Hotel, the Buhl Building, the Masonic Temple—these last three in process of construction, and also the beautiful residences along the river and the lake.

Although emphasis has been placed on the larger industrial and engineering features of Detroit, there are many other industries and engineering projects which will be of much interest to the Alumni coming to the meeting.

*W. R. Kales, '92, Chairman Executive Committee,  
J. C. Hawley, '93, Chairman Publicity Committee.  
Granger Whitney, '87, Member Publicity Committee.*

## TECHNOLOGY CLUB OF RHODE ISLAND

The morals of the club would appear to be open to criticism by the Watch and Ward Society judging by our entertainment at our recent meetings, for we play poker one month and then reform to take up roulette and crap the next. However, we have no raids to record, thus proving either that our joint was a harmless one or else that we had several friends in the Providence Police Department.

Larry Knowlton introduced us to the game of "Poker Patience" or "Solitaire Poker" at our February meeting. It was a good game, but Chet Morey forgot that it was solitaire and

started to bluff himself. Heine Haskell proved the most adept and was duly presented with a handsome radio set guaranteed to get New York and Boston . . . when relayed by local stations.

Many of the club members listened in on the New York Association's Annual Banquet. It came in perfectly here from almost any one of four stations and was truly a remarkable step in radio broadcasting. Quite appropriate that the experiment should be conducted before a group of Tech Alumni.

This month we held our annual pageant of Monte Carlo and it was truly a costly affair for those not born under Sirius,



the dog star. (Judging by the refreshments, this month was dominated by the hot dog star.)

The roulette table drew the crowd and the careless way the money was squandered was a caution. They threw it away as if it were paper . . . which it was. Many were the systems devised to beat the bank, but profiting by the results of the previous year, the bank was able to declare a fat dividend at the end of the evening. The golf addicts discarded the roulette method of losing money rather early in the evening and started the ivory cubes rotating in secluded portion of the casino. Apparently, they were well trained, for this crowd predicted the best banker in the club in the person of Sol Makepeace, entitling him to a bill fold of real leather in which to store his wealth. Frank Milliken was runner-up.

Several new members have hit the trail recently, the latest being, Harry S. Duckworth, '94, and Everett J. Wilson, '21.

Norris G. Abbott, Jr., '20, *Secretary*,  
107 Providence Street, Providence, R. I.

#### SOUTHWESTERN ASSOCIATION OF M. I. T.

Orville B. Denison, '11, Executive Secretary of the Alumni Association, was the guest of honor and principal speaker at our dinner held on March 10 at the Kansas City Athletic Club. Denison was in good form and among other interesting songs he gave us his world-famous and renowned "Rebecca." You may know that everyone enjoyed it.

At the close of the dinner, Mr. Denison gave a most interesting talk on the work at Boston, which was followed by moving pictures of the 'Stute.

New officers were elected as follows: Harry A. Rapelye, '08, II, President; A. S. Keene, '98, IV, Vice-President; and Page Golsan, '12, VI, Secretary.

Others present were Charles E. Brown; Harris E. Dexter, '12, IV; John H. Driggs, '21; John J. Falkenberg, '19, I; Robert L. Falkenberg, '19, I; E. A. Hardin, '21; Hermann C. Henrici, '06, II; Henry F. Hoit, '97, IV; Ellsworth V. Holden, '21, IV; Donald MacAskill, '18, IV; William L. McPherrin, '14, II; Edwin M. Price, '08, IV; Richard J. Sholtz, '22; Henry C. Smith, '12, IV; J. C. Sunderland, '83, IV, and Howard F. Sutter, '13, I.

On the day following the dinner, Denison, Henrici, and Rapelye visited several Kansas City High Schools and short addresses about Tech were made to the students.

We are compiling a list of alumni in this territory. The year, course, residence, address, business address, firm name and character of business will be included for each alumnus.

Our territory has been tentatively taken as Western Missouri, Kansas, Nebraska, Oklahoma and Arkansas.

The entire list when completed will be sent to each alumnus in this district. In order that your registration be correct, send in this information to the undersigned right now.

Page E. Golsan, '12, *Secretary*,  
Great Western Portland Cement Co., Rialto Bldg.,  
Kansas City, Mo.

#### TECHNOLOGY CLUB OF LAKE SUPERIOR

The Technology Club of Lake Superior held its annual banquet and meeting on Friday evening, March 7, at the Kitchi Gammi Club, Duluth, Minnesota. This gathering was arranged to fall on the evening of the New York Alumni Banquet so that the speeches delivered at that dinner could be enjoyed by our members here at the "Zenith City of the Unsalted Seas."

There were ten Tech men present at the dinner and meeting, Mr. Walter G. Zimmerman, '98, President, Duluth; Mr. C. D. Brewer, Vice-President, Duluth; Mr. Leland Clapper, Two Harbors, Minn.; Mr. W. R. Peyton, '90, Duluth; Mr. C. D. Steele, Duluth; Mr. Watts S. Humphrey, Hibbing, Minn.; Mr. D. H. Radford, '12, Duluth; Mr. Carl Brewer, '07, Hibbing, Minn.; Mr. James Elliott, '24, Superior, Wis.; Mr. J. A. Noyes, '12, Secretary, Duluth.

During the evening while we were listening in on the radio to the speeches delivered at the New York Alumni Banquet, we received the following two telegrams. The first was from Mr. Frederick Bosson of Calumet, Michigan, '80 as follows: "Expected to be with you tonight but could not make it. Kindly give my regards and best wishes to the gang."

The other telegram which we received was from Mr. Holman I. Pearl, '11, from Crosby, Minnesota, reading as follows: "Getting program fine through Pittsburgh. Couldn't quite reach Honolulu. Regards to the bunch."

The local alumni have been much impressed with the good work that our Executive Secretary, Mr. O. B. Denison, is doing and we are all looking forward to his meeting with us at Duluth on May 9 and 10, at which time we hope to beat any previous attendance record of Tech men here at the head of the lakes.

J. A. Noyes, '12, *Secretary*,  
910 Alworth Bldg., Duluth, Minn.

#### BERKSHIRE TECHNOLOGY CLUB

The Berkshire County Alumni utilized the famous March 7 date for a reorganization meeting at the Park Club at Pittsfield. While inclement weather cut down the out-of-town attendance, there were nevertheless eighteen new and old-timers at dinner, and several recruits joined during the evening. Al Hough, '19, presided at the piano, and dinner was enlivened with songs we used to sing, notably, "Take Me Back to Tech."

A new Constitution was adopted, and a strong modernist lobby succeeded in changing the former nomenclature of the club to "Berkshire Technology Club." The expected contest for Presidency of the club did not develop, as at the last moment Mayor C. W. Power, '89, decided he couldn't try to run the City of Pittsfield and the club simultaneously, and conceded the field to J. McA. Vance, '91. The local columnist took due note by remarking "two presidencies for Joe Vance," as the newly-elected is also leading the Pittsfield Club of the Eastern League. Your scribe was duly elected Secretary, after having prompted the nominations committee. After these arduous tasks, the group listened to the New York radio program, wondering why it didn't start earlier so that the country cousins wouldn't have to sit up until midnight.

The Berkshire Club claims to be the only alumni organization which can boast a member of the original class (Daniel M. Wheeler, '68), and a co-ed architect for Henry Ford (Miss Lucy D. Thomson, '96).

Any M. I. T. men who did not receive notices of this meeting are requested to get in touch with ye scribe. Meetings are planned for the second Tuesday of each month, and will normally be preceded by a dinner at the Park Club.

John M. DeBell, '17, *Secretary*,  
120 Dodge Avenue, Pittsfield, Mass.

#### INTERMOUNTAIN TECHNOLOGY ASSOCIATION

Mr. Orville B. Denison, Executive Secretary of the Alumni Association, visited Salt Lake from March 16 to 19.

A luncheon was given to Mr. Denison on March 17 at the University Club.

On March 18, Mr. Denison and the members of the Association were the guests of Mr. Louis S. Cates, '02, Vice-President and General Manager of the Utah Copper Company, on a trip of inspection of the company's mine at Bingham and mill at Magna, Utah. In the evening, a dinner was held at the Hotel Utah with fifteen members in attendance. Mr. Denison spoke of the recent developments at Tech, of the student life and activities as compared with ten years ago in Boston, supplementing his talk with a moving picture film taken in 1923, when Dr. Stratton was inaugurated.

B. W. Mendenhall, '02, was elected Chairman; W. H. Trask, Jr., '06, Secretary-Treasurer, and these with V. S. Rood, '07, W. L. Whittemore, '05, and John T. Ellsworth, '08, constitute the Executive Committee.

Others present at the dinner were: L. T. Cannon, '96; Paul Lincoln, '06; George L. Browning, '22; J. W. McCausland, '18; H. H. Calvin, '12; C. I. Justheim, '18; P. J. Hale, '08; L. S. Cates, '02; William Jennings, '15; L. S. Hayes, '23; and R. W. Senger, '05.

The visit of Mr. Denison was greatly appreciated by the association. We all think he is a prince.

W. H. Trask, Jr., '06, *Secretary*,  
University Club, Salt Lake City, Utah.

#### THE CINCINNATI M. I. T. CLUB

Nineteen radio bugs deserted their own sets and joined the rational members at the University Club on March 7. The total attendance was thirty-six.

The first speech came in with bell-like clearness whereupon President Luther, '08, dispatched a telegram. The New York dinner became disorderly immediately thereafter and a free fight was in progress when by heroic efforts the chairman restored order and read the telegram from Cincinnati. "Speeches coming in very clearly," it read. This put everyone in good humor in Cincinnati and apparently it quelled the riot in New York for the program proceeded peaceably enough to the final Stein Song.

President Luther broke the news to the club that Cincinnati had been suggested for the 1925 meeting of the Technology Clubs Associated. The suggestion was well received but no action was taken.

F. W. Morrill, '07, *Secretary*,  
5713 Valley View Avenue, Cincinnati, Ohio.



# NEWS FROM THE CLASSES

News from even-numbered classes is published in issues dated November, January, March and May. News from odd-numbered classes is published in issues dated December, February, April and July. The only exceptions to this rule are those classes whose Secretaries have guaranteed the appearance of notes in every issue. These classes are: 1896, 1900, 1901, 1902, 1905, 1907, 1911, 1912, 1914, 1915, 1916, 1917, 1918, 1920, 1921, 1922 and 1923. Other classes adhere to the alternate schedule. Due to strict limitation of space, *The Review* is unable to publish lists of address changes of members of the Association. The Alumni Office in Room 3-209, M. I. T., will supply a requested address or will act as the forwarding agent for any letters addressed to members of the Association in its care.

## 1868

ROBERT H. RICHARDS, *Secretary*, Carter Hall,  
Warrenton, Virginia

Nathaniel W. Appleton writes from time to time to the Secretary, giving him accounts of his interests in home life.—Eli Forbes is devoted to his golf. It is impossible to get him to come to Boston to attend meetings of the class.—Joe Revere is on hand for all that is going on. He complains that he is growing old, but he does not show it. He is quite constant in his attendance at the meetings of the American Institute of Mining Engineers, which he much enjoys.—Safford's acute deafness makes it very hard for him to get much pleasure from meetings of the class, but he seems well.—Wheeler corresponds with the Secretary and is much interested in Technology and in all that is going on, but he is so far away, it is hard for him to get on often.—Eben Stevens has gone down to Georgia for warmer weather during the cold months North. Last fall he and Joe Revere made a raid on Eli Forbes and took him over to Worcester for dinner, and had a real good time with him.—Your Secretary has missed his occupation of teaching, which he followed for forty-six years and has now a substitute for it in caring for his wife's nephew, Jim. The family went to Hotel Englewood for July and August.

## 1876

JOHN R. FREEMAN, *Secretary*, 815 Grosvenor Building,  
Providence, R. I.

Joseph Irving Estes, who for a year was a member of the Class of '76, died on the 11th of March at the Massachusetts General Hospital in Boston. He was compelled to leave our class by reason of ill-health, but afterwards regained his health, studying law for a year and a half. In 1878 he joined the staff of the *Boston Herald* as a reporter and during twenty-five years of service worked up through various positions to that of News Editor. In 1898 he resigned from the *Herald* to become a member of the Editorial Staff of the *Boston Transcript* and occupied the various positions of City Editor, Daily News Editor and Editor of Business News, thus serving the *Transcript* continuously for about twenty years. He continued steadfastly at his editorial work until his last illness. He is survived by a widow and four daughters.

## 1882

WALTER B. SNOW, *Secretary*, 115 Russell Ave., Watertown, Mass.

From time to time, it is learned that distant members of the class have been in Boston without having had a chance to meet the local members. To all such, it is suggested that if they will inform the Secretary of their presence, or, better still, notify him of their intended visit, he will undertake to get the local members together for a luncheon and the renewal of acquaintance.

Notice has but recently been received of the death in May, 1923, of Harvey E. Hannaford of Cincinnati, who was at one time connected with this class.

## 1884

HARRY W. TYLER, *Secretary*, M. I. T., Cambridge, Mass.

A. H. GILL, *Acting Secretary*, M. I. T., Cambridge, Mass.

It was a shock to read the following account of Appleton's death in the *Boston Transcript* for March 19:

"Captain Charles Brooks Appleton, for many years a resident of Brookline, occupying the residence which gave the name to Netherlands Road, and for a score of years prominent in military and patriotic organization circles, died at Phillips House, Massachusetts General Hospital, Tuesday night, after a brief illness.

"Captain Appleton was born in Boston, October 1, 1862, the son of Charles Henry Appleton and Jane W. Brooks. His school years and youth were spent in Dresden, Germany, with

his parents. There he prepared for college, returning to Boston to enter the Massachusetts Institute of Technology, from which he was graduated as a mechanical engineer, in the Class of 1884. After graduation he served for some time as an instructor in the Institute, in the Mechanical Engineering Department.

"Possessed of an ample competency, Captain Appleton was able to enjoy the peculiar pursuits of a man of refined tastes. A lover of horses, and an accomplished equestrian, he maintained a stable of saddlers, and was frequently seen on the bridge-paths of the suburbs. Inclinations strengthened by study of military matters led him to enlist in Troop A, 'National Lancers,' First Squadron Cavalry, M. V. M., December 15, 1896. In that organization he found ample opportunity to engage in his favorite sports, and enjoyed the varied duties of the service. He passed through all the non-commissioned ranks, and became second lieutenant, May 22, 1906, and first lieutenant in February, 1909. In July, 1911, he was promoted to the captaincy of the organization, in which position he continued for about two years.

"Captain Appleton was an active and helpful member of several hereditary-patriotic societies, including The Mayflower Descendants, Society of Colonial Wars, Society of the Cincinnati Sons of the American Revolution, Sons of the Revolution, Society of the War of 1812, Society of the Founders and Patriots of America, holding important offices in several of them. He also was a member of the University Club of Boston.

"A man of scholarly instincts and desires, Captain Appleton contributed to his surroundings the influence of an agreeable man, of highest moral character, and sound business sense. Unassuming in his demeanor he gained and held his place among men by merit, rather than aggressiveness. A loyal friend, he recognized in others those traits which were his characteristics, and he sought congenial companions, choosing his friends not by numbers but by worth.

"Captain Appleton's wife was Marion Kingsbury, of Boston, to whom he was married October 12, 1886, with whom he found congeniality. She died in June, 1919. He continued to make his home at 20 Netherlands Road to the time of his death. He is survived by a brother, Benjamin W. Appleton, who lives in Buffalo, N. Y."

He was abroad as a boy seven years in Florence and Dresden, and entered the Institute from the Cambridge High School. After leaving the Institute, he was one of thirteen of us, who assisted for a year or longer. Later, he was with the Wire Rope Machinery Company, the Steel Cable Engineering Company, E. D. Leavitt, Jr., Pumping Engines, and the Atlantic Works.

At the class dinner in November he stated that he had been at the hospital for a few weeks for treatment of a malignant growth in his throat.

The funeral took place from Mt. Auburn Chapel on Sunday, March 23, and was attended by delegations from the Lancers and various other bodies of which he was a member, and five of his class.

Tyler sailed with his wife and daughters, Elizabeth and Genevieve, for Havre, March 12, his objective being Paris. Thence he intends to motor to Barcelona and Southern Spain, to Madrid east along the Pyrenees and through the Riveira to Italy. In Naples, he expects to attend, as a representative of the American Academy of Arts and Sciences, the Seven Hundredth Anniversary of the University of Naples. Later, he goes to Switzerland and France, returning home about September 22.

## 1886

ARTHUR G. ROBBINS, *Secretary*, M. I. T., Cambridge, Mass.

A new book entitled "Current Economic Affairs," published by the G. H. Merlin Company of York, Pa., is receiving very favorable notices in various press reviews. W. R. Ingalls, '86, is the author.

Another work of Dr. Ingalls, entitled "Wealth and Income

1886 Continued

of the American People," published by the same firm, is now in its second edition.

Evidently, Ingalls is wielding the same facile pen as was his custom in undergraduate days when he so successfully directed the policies of *The Tech*.

#### 1888

WILLIAM G. SNOW, *Secretary*, 112 Water St., Boston, Mass.

At the Annual M. I. T. Dinner held on March 7 at the Waldorf-Astoria, New York, Besler and Bird were present from '88. One of the principal features of the meeting was radio broadcasting. One of those present stated: "It was a moment of intense interest when there was read at the dinner, a few minutes after a violin solo was rendered and which preceded the speaking, a 'wireless' from London, stating that the music had been picked up at Manchester and other points, and was being broadcasted beyond."

Bessie Egbert, the wife of Charles L. Holmes, died on January 1, at her residence in Waterbury, Conn. She was a daughter of the late Hon. Albert G. Egbert of Franklin, Pa., and Eliza Phipps Egbert now living in Franklin. They were married on May 28, 1896. There is a son, Frederick Taylor Holmes, of the Class of 1925, Yale Academic.

#### 1890

GEORGE L. GILMORE, *Secretary*, Lexington, Mass.

Your Secretary with his better-half is spending a few weeks at The Carolina, Pinehurst, N. C. He is spending most of his time in an attempt to hit the golf ball and get in shape to do some of you up at The Tech Clubs Associated Meeting at Detroit in May and also at our Thirtieth Reunion in June of next year.

While in New York he dropped in on Ed Stearns and found him to be the same old boy as in our days at Tech.

At the New York Club Dinner, Ninety was represented by Clement, Eisendrath, Gilmore, Nims, Tuttle and Whitney.

Now come across some of you chaps and drop your Secretary an occasional line.

#### 1892

JOHN W. HALL, *Secretary*, 8 Hillside St., Roxbury, Mass.

The following is from the Detroit Engineering Society Bulletin: "On February 1, acting Mayor Joseph A. Martin announced his appointment, to take effect at once, of W. R. Kales, to the City Plan Commission, to fill the place left vacant by W. T. Skrzycki, who was transferred to the Water Board. The appointment runs to March 1, 1925.

"The charter provided that the City Plan Commission shall consist of a structural engineer, with other professions, and this appointment comes under the head of the profession mentioned. Mr. Kales is a member of the firm of Whitehead & Kales, and President of the Kales Stamping Co. He was President of our society in 1909 and 1910, and is a member of the Executive Committee at the present time. He has taken a very active interest in the affairs of the society and has given generously of his time and energy toward our housing project."

And I hear from Ely as follows:

"To my surprise I saw my name in the March issue of The Technology Review under the 1892 class news.

"What you printed is rather old news and I suppose that I am much to blame for not having notified you some time ago. There is a famous pavement of good intentions, to which might be added accuracy; and I suppose I will be lucky if I can get into Heaven by even one sixty-fourth of an inch.

"I was in the ornamental iron business in Pittsburgh with Mr. Chester B. Albree, who died some five years ago, after which I disposed of my interest in the business and later became interested at the Carnegie Institute of Technology, which ultimately led to my going on their faculty.

"Perhaps you would be interested in knowing that I have been appointed, along with another member of our faculty, by Governor Pinchot, to take charge of the industrial power investigation in connection with the Giant Power Survey of the State of Pennsylvania."

#### 1894

SAMUEL C. PRESCOTT, *Secretary*, M. I. T., Cambridge A, Mass.

The outstanding item of interest to '94 men at the moment must be regarded as the Thirtieth Anniversary Reunion of our graduation. The plans for this important event are now well under way. Some weeks ago President Bovey appointed a reunion committee consisting of Piper, Tenney and the Secretary, with power to add other members as might be found advantageous. Spalding, Cheney, Weston, Phelan, Claffin and Gardner have been asked to join the committee, so a group of active men are developing plans.

The success of our Twenty-fifth Reunion has kept alive such pleasant memories that a large number of those who attended at that time have expressed the wish that we might repeat our experiences under essentially the same conditions. The Committee agreed heartily with this group opinion, and accordingly have proceeded to make the necessary arrangements. Why not repeat? Everyone had a good time and there was a lot of good fellowship, the most important ingredient in any reunion. So the committee is ready to announce:

The Time — June 6, 7, 8 and 9. The first week-end in June.

The Place — East Bay Lodge, Wianno, on Cape Cod. Here there will be found abundant opportunity for the sports, the quiet friendly chats, and the pleasurable loafing together that make up the profitable part of a getting together of men connected by the common ties of our association at Tech in those days of the early nineties. A suggestion that this be made a family affair by inviting the wives to attend was submitted to a rather wide canvass of members, the results of which have led us to the decision that it would be wiser to confine the reunion to class members only. In this way we can probably guarantee a larger attendance, and the men will feel entirely free to devote their attentions to the reunion events and to renewing old acquaintance and friendships. There will be enough to do. Read on and see what is before you. Here is the tentative program:

Friday, June 6, meet at the Engineers' Club, 2 Commonwealth Avenue, Boston, at 12:30 for an informal luncheon. Bring along all the things you will need for the week-end, your golf clubs, tennis rackets, etc., for the start for the Cape will be made shortly after lunch. The trip will be made by motor cars, of which it is expected there will be a plentiful supply. Most of the men from near-by places will probably drive to the reunion anyway, and the Boston district men will be canvassed and asked to use their cars so that those coming from a distance may be sure of transportation, as was the case five years ago. Cheney has been asked to serve as the Transportation Manager and this ensures a perfect service. The trip to the Cape will be made either by way of Plymouth or by way of Middleboro as may be desired, but the former route will give an opportunity to see the changes at Plymouth which were made at the time of the Tercentenary celebration of that old burg. We shall arrive at Wianno in time to get settled and make the necessary local plans for sports, etc., before dinner. Spalding has been placed in charge of the golf, and has arranged for all kinds of competitions and events. As class champion he is exceptionally qualified to run this very important part of the reunion. We cannot tell you all about it now, but it will be good! Claffin will do the same for those who prefer to play tennis, and you know what that means. Weston will look out for the musical program. Do you remember those special songs we had? There will be more of them — songs we all can sing. Tenney and the Secretary will take along rifles and ammunition for the championship contest in marksmanship. And baseball — the big, soft indoor kind played out of doors, not too strenuous for those who have added weight with their years. Of course you can swim, so a bathing suit should be put in your outfit. We shall not even draw the line at Mah Jongg if anyone wants to play that nerve-racking game, and if some prefer bridge there will be opportunity. There will be special things, too. We can't tell the world about them now. Of course the golf will be the great feature of Saturday, except for the class dinner that night. That will be the real crowning event of the reunion. President Stratton has promised to join us at dinner if that is possible for him at such a busy time in the Institute year, and it will certainly be a great pleasure for the fellows to meet him in this way, and to have him as our guest. Lovejoy will again take charge of the photographic end of the celebration, but perhaps he will not know it until he sees this in print. Altogether, we are going to have a great reunion and we expect every man who can get here to be on hand. We had sixty men present, five years ago. Let's make it a hundred this year. Monday may be spent at Wianno, or in leisurely getting back to Boston. Tuesday will be graduation day, and it will surely interest many who have not been to the exercises in recent years to see how differently it is done, with its mixture of scholastic and military features. The general letter on the reunion will go out shortly, and all will get the news of the plans, along with a touching appeal to come and have a good time.

The Secretary has heard from a few of the men since the last notes came out. Rigby Wason has joined the great majority of married ones. He held out a long time, but judging by the accounts of his wedding carried by the social columns, he is now safely and happily a benedict. — A letter from Chub Howland says that despite the ravages of time he hopes to be with us in June. — Klipstein has found it necessary to give up the reunion, with great regret the Secretary is ready to believe, but ships will not wait, and Klip and his family are sailing for Europe.



1894 Continued

on the 5th of June. We shall miss him, but we wish him a fine summer abroad.—Charley Meade has returned to his early home at Millerton, N. Y. We expect him at Wianno.—Ferguson is back in Boston, and is getting his clubs in shape to show us how it should be done.—Harry Bates is still in Atlanta, his address being 269 East 4th Street. We count on hearing him sing in June as he used to in the old days in the Chemical Lab.—L. K. Davis has sent in a new address, 143 East 39th Street, New York.—M. S. Chace was here in January. He may be reached through his old home address 31 Wales Street, Dorchester.—George Taylor has moved his business to 261 Franklin Street, Boston.—Shurtleff is President of the National Association of Landscape Architects.

## 1896

CHARLES E. LOCKE, *Secretary*, M. I. T., Cambridge, Mass.

J. ARNOLD ROCKWELL, *Assistant Secretary*, 24 Garden St., Cambridge, Mass.

The one big item to impress upon '96 men is that the Detroit meeting of the Technology Clubs Associated comes off on May 19, 20 and 21. Announcement has already been sent to every Technology man, but this announcement did not make mention of a fact which is of tremendous importance to members of '96 and that fact is that Mark Allen is located in Detroit and is looking forward to this May meeting as an opportunity to welcome personally '96 people. He has moved into a new home that he has recently built and it is reported to be a most interesting house. He can put up personally fifty men and will guarantee to make the trip to Detroit a memorable one for those who attend. Furthermore, he can and will arrange for visits to any commercial, historic, or social buildings in the city and a personal interest will be shown on such visits. Those who knew Mark as a student will remember that he was a quiet chap but, nevertheless, there were not many things going on that he was not mixed up in. The Secretary is under the impression that this characteristic of Mark's has continued through his life in Detroit, and that while he has never come out with a brass band he has, nevertheless, become a solid and substantial citizen of the automobile metropolis. It is even possible that he has connections with the police department of that city, which would be of material benefit in case a '96 man should come under police surveillance. With the foregoing invitation and explanation the Secretary would most strongly urge the members of '96 to appear in Detroit if it can be possibly arranged and would suggest to those who think that they may be able to be present that they take immediate steps to write to Mark W. Allen at 510 Lodge Avenue, Detroit, Mich.

Joe Clary made a periodical visit to Boston and called upon the Secretary on March 10, but as it happened to be vacation the Secretary was out of luck in not being in his office when Clary called and therefore is unable to report the changes that have come about in Clary's appearance, habits, and work. Since this is the third time that a similar misfortune has happened, Clary and the Secretary are now determined that some day they are going to get together and the result will be a paragraph for the Class News. Clary maintains that the Secretary has a loafing job and is never to be found in his office. The Secretary maintains that Clary waits around for an opportune time when he can sneak in and leave his card during the Secretary's absence.

Charlie Lawrence reports that at the Annual Dinner of M. I. T. Alumni at the Waldorf-Astoria in New York on Friday, March 7, there were five '96 men present, including F. G. McCann, E. A. Baldwin, G. C. Hall, T. I. Jones and C. E. Lawrence. Jones also brought Mrs. Jones along for the occasion. This is reported to have been a most enjoyable time, but the pleasure of the '96 crowd was very much marred by the fact that they numbered only five as against twenty-five present of the Class of '95.

Eighteen hundred and ninety-five filled two tables and had an overflow. The '96 crowd was not big enough to have a table of its own and all of this happened in spite of special appeal made by Lawrence to every '96 member around New York. This situation is disconcerting to the Secretaries, to say the least. They cannot believe that '96 has sunk as low in class spirit and loyalty as this showing would indicate. It may be that the New York bunch is too busy with its own personal affairs. One indication of this is that a number of the New York crowd have yet to fill in and return their questionnaires for the class book. The remedy, as the Secretaries see it, must come from within rather than from without. In other words, while headquarters stands ready to do everything possible to keep up class spirit, the members in the various centers of the country will have to do their share. The pity of it is that such a hard working and loyal fellow as Charlie Lawrence is not supported by his local members.

## 1898

ARTHUR A. BLANCHARD, *Secretary*, M. I. T., Cambridge A, Mass.

The majority of ninety-eight men must be pursuing the even tenor of their ways, for very little has come to the ear of the Secretary of their doings in recent months.

Changed address cards indicate that Seth Humphrey is stopping, for a while at least, in the Philippine Islands; that George Wadsworth is with the Conlon Corporation, 19th Street and 52nd Avenue, Chicago; that Horace Smith is with the Sealright Company, Fulton, New York; and that Paul Wesson is with the Eastman Kodak Company.

The only press clippings received relate to men who were once '98: Clifford Swan trains with '99. He addressed the Delta Upsilon fraternity at Brown on the subject of Universal Peace. Henry H. Clark is Director of the Department of Design at the Boston Museum of Fine Arts and recently gave an address in Portland. We do not know that he affiliates with any other class, and we think he might show some interest in the class to which he is assigned.

Perhaps the regular fellows who belong to the class who read these notes may be stimulated to send some word of themselves to the Secretary so that we won't have to give the doings of semi-outsiders to write any notes at all.

## 1900

GEORGE E. RUSSELL, *Secretary*, Room 1-272, M. I. T., Cambridge, Mass.

Twenty-seven sons of 1900 turned out on March 24 to attend an informal reunion and dinner for men in and about Boston. It was some party. Promptly at half-past five in the afternoon the clan began to gather in the Alumni Room of Walker Memorial and for more than an hour we had a delightful time welcoming each arrival and renewing friendships. It was great fun. Some of us hadn't met in twenty years and many a good natured jest arose as we noted the changes that time had brought about. There were black heads, white heads and heads like billiard balls. Some had figures like those seen in Vogue; others there were whose general sleek appearance reminded us that we are now qualifying in the middle-aged if not the middle-weight class. Who would ever have thought of Bert Allen and Bert Cotting as being conspicuous in this group? Everybody, however, had come with young hearts and ready to enjoy to the fullest extent anything that might be offered. Here are the names: E. G. Allen, Bowditch, Bugbee, Burns, Burnham, Frank Conant, John Conant, Cotting (the old ball-tosser), Wilbur Davis, Draper, Dunbar, Emery, Fitch, Gibbs, Graff, Howe, Ingalls, McCrudden, Ike Osgood, Remington, Richardson, Silverman, Thurber, Stearns, Russell, Warren and Zeigler.

Dinner in the Faculty Dining Room followed, and during the meal, letters from some of the absent were read and enthusiastically received. After the coffee, plans for the Twenty-fifth Anniversary Reunion were offered and discussed, also the proposition of publishing a class book which should review the activities of each member since leaving school. The idea of a reunion went big and unless Cliff Leonard sees and pounces upon the suggestion recently made, in jest, in The Review, we shall probably go down on good old Cape Cod for a few days' outing. Although the event is as yet far removed, we must all keep it in mind and plan to be there.

Dinner and discussion over, George Gibbs presided at the piano and Russell's recent Alma Mater was tried out. They kindly and thoughtfully said they liked it, but what else could be expected from such a good-hearted, good-natured, rollicking gang? We then adjourned to the basement, where pool tables and four bowling alleys had been reserved for our special mutilation. Dunbar, Emery and Frank Conant (the latter had come all the way from Newburyport), headed three teams of bowlers, while McCrudden, Graff, Bowditch and Howe proceeded to demonstrate their prowess at cowboy. Some of the bowlers, notably the Secretary, had to be instructed in the fine points of the game and occasionally cautioned to use only one alley per ball rolled. Nevertheless, enthusiasm made up all deficiencies in skill, and by real heroism on the part of the pin-bos the match was brought to a successful conclusion. It is thought that Emery, with the help of Davis, Burns and Allen, won.

The gathering proved to each of us that we could play as well as work together. It opened our eyes, if such a thing were necessary, to the fact that we value beyond previous comprehension the friendship and fellowship of those we worked with so many years ago. We are so far removed from those old days that we find unusual pleasure in coming together, and discovering that the men whom we only slightly knew in 1900, we now enjoy calling by their first names.

Not having heard from Jim Batcheller for a long time, the scribe wrote him recently asking for the favor of an accounting.



## 1900 Continued

True to form, Jim came through with the following: "I am delighted to receive a letter from you under any pretext whatever, even if it is in the nature of an SOS call. You say that you did not realize my change of occupation until you ran through the card catalogue. I fear that you have not been in close touch with the previous class reports, because both Bowditch and Gibbs have drawn on me for publicity matter in previous years. I am always glad to try and help supply items of interest and to support all matters of class interest, but beg to be excused from any repetition in blowing my own horn.

"However, for new material, I am glad to supply you with the following. Last summer I took my four-wheeled boat cruising about on a 2,000-mile trip up in the mountains of northern Idaho, Lake Chelan, Washington, British Columbia, and Mount Rainier. This made a very interesting and enjoyable outing for myself and wife and four boys. We weighed in at 4,400 pounds total on the tires and averaged 18½ miles to one gallon of gas over mountains and rough highways. This summer if I can get leave of absence I am going to visit some of the California mining districts and expect to take the family on a two or three-thousand mile cruise in June and July.

"In closing, let me say that I am sorry for all of the rest of you stuck back in the benighted East. We have had lawnmowers running now for three weeks, and spring flowers for five weeks. Isn't that enough to make you want to change your residence?"

Jim always was loyal to the class and his ready response was only to be expected. He holds the position of Professor of Mining at the Oregon Agricultural College School of Mines, Corvallis, Oregon.

Rawson Collier writes from Atlanta, Georgia, where he is with Dwight P. Robinson & Company, Engineers and Constructors. It seems that Collier was instrumental in making Orville Denison's trip through that part of the South a great success, so much so, that Denison, upon his return, had much to say concerning the "spirits" of 1900 men. "As for news, 'there ain't no such animal,'" writes Collier. "Nineteen hundred men are 'as scarce as hen's teeth' in this locality and I never see any of them or get any news from any of them, so there is nothing that I can give you except personally regarding Rawson Collier, 1900 Course VI. As far as business is concerned he works continuously and assiduously. Outside of that, he refuses to tell what he does. So there you are.

"Seriously speaking, if you will look over your list of 1900 men located in the southeastern states, and will furnish me with the names and addresses, I will make it a point to call on these men whenever I am in their locality and I will try, in that way, to gather some news for you. I have not a copy of the Index of graduates and therefore I will have to count on you having this list sent me and I will do all that I can to round up the 1900 men in the South."

Such an offer as Collier makes is very heartening and at the recent class meeting it was voted that Collier be appointed Secretary for the Southeast, and all men in this section of the country are urged to send to him as often as possible notes concerning 1900 men.

In the March Review the hope was expressed that another number might contain information as to the whereabouts and doings of F. H. Cooke. Fred is a hard animal to smoke out, but the Secretary was so successful as to obtain from him a most interesting letter, which deserves reproducing in full:

"Yes, it is a long time since that day in June, 1900, when the class finally broke up into its individual ingredients after the 'pop' concert in Mechanics' Hall. I must say that I felt rather badly broke up in more ways than one the morning after that night.

"I read your dope with much interest and several twinges of recollection in the last number of The Review, particularly with reference to the days in Cherryfield, Maine, in June, 1889. That is a nice little old town and I would like to go there again some day, though I do not believe I would find anyone I knew or who knew me. Still, there are certain landmarks that I daresay are still there.

"I have really been in Boston very little since I quit the employ of the Boston Elevated Railway on July 1, 1901. I have seen the new Institute only once, and that was for a brief time on a bitter day in December, 1916, when things around the new buildings had not been entirely polished up, or at least so it seemed to me.

"I daresay the class will have a quarter century reunion next year. Certainly, it should have and I do hope I will have the good luck to be there, though this is very doubtful, as a year ahead is a long way in the Navy.

"When I left Boston in July, 1901, I went to work as a structural steel work draftsman in the Portsmouth, N. H., Navy Yard and stayed there until December, 1903. I was com-

missioned a Lieutenant, junior grade, in the Civil Engineer Corps of the Navy in January, 1904, and since then have moved around considerably, as we all do.

"In 1904 and 1905 I was at Mare Island, California; in 1906, 1907 and 1908 in the Philippines, returning home via India and Europe; in 1909 and 1910 I was in Washington, and made a voyage to Europe and return with the Atlantic Fleet, as it was then called, in November and December, 1910; in 1911 I was at the Norfolk Navy Yard; 1912 to 1916 inclusive I was loaned to the Panama Canal and served on the Isthmus for five years as designing engineer, being employed particularly on the coaling plants and dry docks, with some radio stations and the two very large floating cranes on the side.

"This part of my career I look back on with the very greatest pleasure, as it was a privilege to be associated with the construction of the Panama Canal. While in Panama, I was married on December 2, 1914.

"In 1917, the first year of the War, I was at various places in the States; I went to France in April, 1918, in charge of the construction of the Lafayette Radio Station near Bordeaux, the spectacular feature of which was the fact that it called for the erection of eight radio towers, each 820 feet high.

"The Armistice found us only fairly started on the tower erection, though if the War had lasted six months longer, I have no doubt the towers would have been up and the station functioning. I left France in January, 1919, and for nearly three years, 1919, 1920 and until September, 1921, I was a member of the 'Board on Valuation of Commandeered Property,' charged with the duty of valuing a very considerable amount of real estate that had been 'commandeered' for war purposes. This also was interesting duty, as the board was practically a court and proceeded along the lines of actions in condemnation.

"Since September, 1921, I have been at this station and neither I nor anyone else can predict how much longer I will be here.

"I have seen very few 1900 men in the past twenty years. I see Thurber once in a long while; the only place at which we have served together in the Navy was at the Bureau of Yards and Docks during the War. Southworth, as you know, is a permanent member of the staff at the Bureau of Yards and Docks. I had the pleasure of seeing him here for a day or so last week.

"I have seen Frank Chase about two or three times since being here at Great Lakes. I do not go to Chicago very often, and when I do go, I generally get back home as early as possible. I have three children, but they are all very juvenile, my oldest being but six years old, quite a contrast to your boy who will graduate from Tech this year, 1924.

"The Navy, like most other things of this world, has its advantages and disadvantages, and among the latter, I believe that the most striking is the nomadic life one leads. This is all very well for young bachelors, and I have doubtless seen much more of the world than I probably would have seen had I not joined the Navy; but when one grows older and begins to accumulate a family, moving on every once in a while eventually loses a good deal of its charm.

"Congratulations on your authorship of the new Tech song. I have not heard it yet, but hope to in the not distant future.

"I will be with you in spirit on the 24th. Of course, the class must have a Twenty-fifth Anniversary get-together and I am certainly going to make a determined effort to get there, for I feel that I have been quite remiss as an alumnus, as I think Bowditch, Gibbs, and other predecessors of yours will freely admit."

George Emery recently dropped into the office for a social call and reported a change in his work. For nearly thirteen years, Emery was connected with the General Electric Company at Lynn, during which time he had much to do with steam turbine and compressor design. This last fall he severed his connection with the company to go with C. A. Schellens, Consulting Mechanical Engineer, in Boston, where he is engaged in working out some special problems in mechanical design.

In closing this column the Secretary would like to call your attention to the statement made some months ago to the effect that this column can only prosper in proportion to the amount of work which the class is willing to devote to it. It is often hard to write about oneself, but it is comparatively easy, having met a 1900 man, to jot down a few details concerning the meeting and general information as to what he is doing. We shall have to adopt the slogan of 1911, "Write to Russell."

## 1901

ALLAN WINTER ROWE, Secretary, 295 Commonwealth Ave., Boston, Mass.

V. F. HOLMES, Assistant Secretary, 131 State St., Boston, Mass.

The following notice has just reached the writer concerning Fred Clapp. As many members of the class know (at least that

## 1901 Continued

portion sufficiently literate to derive information from the daily press) Fred sat in on the Teapot Dome investigation in the early days. Whether the following notice is in any way connected with Fred's earlier contact with the United States Government, the writer is unable to say. The notice is as follows:

"Frederick G. Clapp has been engaged by Australian interests to make geological and technical investigations in New Zealand and Australia, and has already spent some weeks in the former country, from where he proceeded to New South Wales in January. He will visit every reported petroleum occurrence of importance in the country, and will include an investigation of the Kimberley desert of Western Australia."

Your Secretary has dug down into the sermon barrel for the last few bits of stray information concerning members of the great and glorious Class of 1901. The response this year to what one member of the class has called frenzied appeals, has been far more informative and helpful than in the years gone by. In fact, with an optimism frankly unwarranted, your Secretary feels that in time members of the class may become educated to the point of sending in items of interest about themselves without the insistence on his part which has characterized the efforts of the last few years.

Another thing that would be helpful would be for class members to notify the Alumni Office of any change of address. Every little while your Secretary sends out notices only to have an appreciable number of them returned through the dead-letter office as undelivered.

Now, although the snow is on the ground and the earth is muddy under foot, the air is full of approaching spring. In fact, the newspaper this morning announced that spring began officially at 4:23 p.m. today. Personally, the writer thinks this voiced a pious aspiration, although couched as a statement of fact. Now the real point is that spring really is approaching and with it comes the possibility of a reunion. The so-called five-year celebration is probably scheduled for the summer of 1925. The usual efficient committees are at work on this problem, but there does not seem to be any particular reason why the Class of 1901 should not have a little, quiet, pleasant, domestic forgathering in part, at least, to draw plans for the coming orgy. That a class dinner at Commencement time would be desirable, admits of no debate. This your Secretary will arrange with the concurrence of our genial President, Frederick Roy Courtenay Boyd, Esq. But, this does not answer the main question.

Several years ago the Class of 1901 celebrated its Twentieth Anniversary. A committee was formed, publicity was given, notices were sent out, plans were made, accommodations hired, all in proportion to the enthusiastic response from the members. The Class of 1901 was apparently prepared to stage the most successful class reunion that the Institute of Technology had ever produced — and then came the drab reality following the rosy vision of promise. We went to Wianno. We were royally entertained. We had a thundering good time, but our number was not legion. The first twenty-four hours of the reunion was spent in large measure by your Secretary in telegraphing cancellations of various attractions employed to furnish diverse entertainment to the hordes of the Class of 1901.

This year your Secretary thinks it would be an extremely good bet to have a little, simple, informal gathering at some such place as the Wianno Club. It can be operated very inexpensively and brought within the range of everyone's means. With past experience as a criterion, the accommodations at the club can be secured for \$8.00 or \$10.00 a day, possibly less than the latter figure, this to include three meals of the kind we designate as "square"; a comfortable bed to sleep in and a very lovely outlook on an arm of the sea. A golf club immediately adjacent is open to guests of the hotel by the payment of the usual modest charge. There is salt-water bathing, there is fishing, tennis and a variety of other diversions. Of the men who attended the Twentieth Anniversary, the writer feels sure that every one can be counted upon. In addition, a number of the other members of the class should be able to participate in such a gathering. Now, when you get your Review, if the spirit moves you so to do, sit down and write your ideas on a class reunion. Do it at once and then we shall see from the responses and the amount of enthusiasm evinced whether it will not be a desirable plan to have a small, informal gathering this year as a preliminary to the larger and more formal one of next year. Also send in news if you have any.

I pause for your replies.

## 1902

FREDERICK H. HUNTER, *Secretary*, Box 11, West Roxbury, Mass.

BURTON G. PHILBRICK, *Assistant Secretary*, 276 Stuart St., Boston, Mass.

Our Greenfield, Mass., reporter sends us the following interesting political note, from the *Greenfield Recorder* for March 4:

"Selectman F. Dean Avery, whose continuance in office was the big issue in yesterday's town election, won a handsome victory, the voters deciding to retain him as a town father by a verdict of 1,970 votes, only 34 behind the high man, William H. Barr, who, with Harry E. Ward, will make up the new board. Mr. Avery's good vote showed up well in comparison to the run made by Mr. Barr, who had the nominations of both parties and the endorsement of the Law Enforcement League, while the former had only the Democratic Endorsement. Mr. Barr's total was 2,004 and that of Mr. Ward was 1,458. Hosea B. Mowry and William S. Clark, endorsed by the Law Enforcement League, polled 1,333 and 1,259 respectively." When the Board met to organize, Avery was elected Chairman.

Bob Baldwin reports from New York that the following classmates attended the Annual Dinner of the Technology Club, of New York at the Waldorf-Astoria on the evening of March 7: Franklin, Hammond, Hansen, Hathaway, May, Montgomery, More, Philbrick, and Place. We surmise that Bob was also present as the circumstantial details in his letter would hardly have come through second-hand. (Bob's report will appear in full in the next issue of the *Retort*.) Ross Bates, '03, also sat in with the '02 bunch. Bob reports a most enthusiastic dinner and that '02 led off with the first-class cheer.

## 1904

HENRY W. STEVENS, *Secretary*, 12 Garrison St., Chestnut Hill, Mass.

AMASA W. HOLCOMBE, *Assistant Secretary*, 3305-18th St., N. W. Washington, D. C.

As is usually the case, when the time arrives to compile, compose, arrange, inflate or otherwise prepare the class notes, the amount of raw material in sight requires a reading glass of considerable strength in order that said raw material may be visible.

The foremost subject in the Secretary's mind at present is the Twenty-year Reunion to be held at the Wianno Club on June 20, 21 and 22. You have already had notices which give all the details regarding the matter and mention of the occasion here is intended to serve merely as a jog to your memory and a further incentive to each individual reader to attend. If failure of the United States Post Office to function properly has deprived you of the above-mentioned notice, a postal card to the Secretary will bring you the information.

Sometime during last March the *Boston Sunday Herald*, in its photographic section, published a number of pictures showing automobiles of twenty-five years ago. Among these was one of a Stanley steam car at the top of Mt. Washington after a record-breaking climb. The crew consisted of Mr. F. E. Stanley, the producer of the Stanley motor car, and Joe Crowell. Joe looked perfectly natural in a Stanley, as the Secretary remembers having seen him many times. Joe was wearing the same leather cap which protected his skull when he dove through the vestibule of a trolley car, while engaged in trying to solve the old question of what happens when an irresistible force meets an immovable body.

At last, a winner has appeared for the prize offered for the first letter received which contained any news for publication. The winner is John R. Sanborn and the prize will be conferred on him at the coming Twenty-year Reunion, provided John makes good on the assertion contained in his letter which follows: "I received your notice of the Twenty-year Reunion of the Class of 1904 after it had wandered about the country considerably and it occurs to me that it might be a good idea to revise my mailing address. This is now 517 Seventh Avenue, Bethlehem, Pa.

"I really am very much ashamed of myself that I have not kept more in touch with you and other affairs of the Institute. I am going to make the attempt of my life to attend the reunion. It is probable that I will drive over and will have room for three or four other fellows, so if you know of anybody in this district who might want to go, please put me in touch.

"I look forward to seeing you and the fellows next June."

Sanborn is at present connected with the Roller-Smith Company, manufacturers of electrical instruments, meters and circuit breakers, with works at Bethlehem, Pa. In case any reader is coming to the reunion from the vicinity of Bethlehem, it would be well for them to communicate with him.

It is a coincidence that another bit of news at this time concerns the other Sanborn of the class, George W., the baseball and golf expert. He has been with the Factory Insurance Exchange for some years, but has recently been advanced to a position of large responsibility and is at present on an extended tour of the Middle West on the business of the concern. He says he will be back for the reunion, as he acquired the habit some years ago.

In the drive for Technology members for the new University Club, our class (at the present date, March 25) has at last suc-



1904 Continued

ceeded in defeating both '03 and '05 in one event. We have ten members while the other two classes have but eight each.

Word has reached Boston of the death in San Francisco of Charles Edward Broad at the age of forty-three. He was the son of Josiah Otis Broad of Boston. He was known and probably will be remembered by most of us in the class as Ned. During freshman year, Ned was prominent as organizer and leader of the original Technology brass band, as well as being a member of the football team. Owing to ill health he was not able to complete his course with the class, being delayed a year.

After leaving the Institute he immediately entered the automobile industry, in which he had always been much interested. He was for some time with the Stanley Motor Works in Newton, his home city. Since leaving there, he has been engaged as an engineering expert at various periods in Chicago, Detroit and San Francisco.

He is survived by his wife who was Miss Silver Cornish and whom he married in California in 1917. His sister, Miss Bessie Broad of Newton Centre, also survives him.

In closing, the Secretary wishes again to remind the readers of the coming Twenty-year Reunion and to urge their attendance. As this is the final issue of Class Notes until fall, the Secretary takes this opportunity to wish everyone a happy and cheerful summer and a vacation which will clear away the fatigues of winter, bringing each man back to duty strong and able to write him a letter.

## 1905

ROSSELL DAVIS, *Secretary*, 19 Thorndike St., Beverly, Mass.  
S. T. STRICKLAND, *Assistant Secretary*, 26 Pemberton Square, Boston, Mass.

Here he is. Fred Poole has made up for his past omissions with a letter from Owen Sound, Ontario, where he is General Manager of the Keenan Woodenware Mfg. Co., and the Eureka Refrigerator Co. He writes: "Owen Sound is a thriving young city of 12,000, with several large woodworking factories, iron foundries, etc. Some of the clever ones have it that fishing is the chief summer industry and skating the chief winter industry. This is the English, Scotch, and Irish part of Canada and is quite enterprising and prosperous.

"For the past five years ending 1923, I have been following Industrial Engineering, chiefly in woodworking, with headquarters in Chicago, where I was Supervisor of the Forest Products Engineering Company. I have been hot-footing it all over the United States and Canada during this time and had so many miles behind me that I just naturally got fed up on it and decided to settle down for a while, where we could have a little home life.

"I cannot send everybody in our class a polar bear as a peace offering, but I presume I could send everybody a toothpick. Although toothpicks is only one of the side-lines of our company here, yet we manufacture eight million a day, which is equivalent to one a day for every man, woman and child in Canada." Great pickings!

What right has a Course I man to head an expedition of geologists, archaeologists, anthropologists and ichthyologists? We are informed that Dick Marsh of Brockport, N. Y., has sailed for Panama with this high-brow outfit for the purpose of studying a tribe of blonde Indians said to inhabit the Chucunaque Valley in the eastern part of that republic and of carrying on general scientific exploration. Airplanes will be used for transportation into the interior. Altogether, it will be some party. But where did Dick qualify?

The above is on the authority of Bertrand Johnson, U. S. Geological Survey, Washington, who adds: "For the last three or four years I have been in charge of the Section of Foreign Mineral Reserves of the Geological Survey. We are now engaged in compiling an atlas on the Mineral Fuels Reserves of the world to include coal, oil, gas and oil shale. Most of the descriptions of the foreign fields have been written since the Tower of Babel was abandoned, so you can imagine our task." So Bert's mixed up in oil. Good night!

Earl Weaver writes from Pasadena, California: "It will be seventeen years this summer that I came West, and that whole period has been spent in the three coast states, California, Oregon and Washington. One vacation trip East, twelve years ago, has been the only journey away. You can easily imagine the appeal, therefore, that the Twentieth Reunion of '05 would have for me next year. If the weather is propitious for walking, I may be there. Joking aside, it would be a memorable event of every '05 man's life, and worthy of special effort to meet with the old crowd for a few days.

"In the time I have been out here, I have only come in contact with four '05 men, W. D. Clarke whom I saw quite a lot of while living in Oregon, Kriegsman whom I met once in San Francisco, Leonard Bushnell whom I bumped into at a mechanical en-

gineers' dinner in Seattle and Stanley Hyde at Bremerton, Washington.

"I have been in Pasadena since April, 1920, immediately following release from a three-year trick with the Civil Engineer Corps of the Navy. Am in the building business, at present Assistant General Manager of the Foss Designing & Building Co., Pasadena. It is congenial work, decidedly active and with no present indication of letting up. This part of the Coast is God's country to live in. My happy home circle consists of wife, a seven-year-old daughter and two-year-old son, all of whom join me in being extremely well satisfied with California sunshine. All the tales that you may have heard of the tremendous growth and development taking place in Southern California are true. It's a story you have to see to believe, and then rub your eyes to be sure they are not playing tricks on you. Los Angeles is a big city in the making with all the attendant effects upon the surrounding territory and it's a wonderful thing to watch."

Why is it we get such good long letters from the Pacific Coast? We have done a little research and find that for brevity, our letters vary inversely as the square of the distance from Boston. Witness Robbins' from Sumatra. Who lives in Australia?

Ed Barrier has been advanced from the Inspection Department of the Associated Factory Mutual Fire Insurance Companies to Vice-President in charge of engineering of the Arkwright Fire Insurance Co., one of the associated companies. His address is 185 Franklin Street, Boston.—Fred Wales is in Chazy, N. Y., between Plattsburg and Canada. He runs a lime burning plant, stone quarry, does a general business (?) and is going into orcharding.—John Ayer is resident engineer for Fay, Spofford & Thorndike on the Municipal Pier, Portland.—A letter from Walter Clarke, teeming with restraint, conveys the information that he is still with the Electric Boat Co., Groton, Conn. That's all.—A photograph of Bob Farrington preparing to drive (a golf ball) into a crowd of real estate men at St. Augustine, Florida, appeared on the society page of the *Transcript*.—Has anybody heard of the two Torontorians, Sam Seaver and Arthur Freeman, lost now for a couple of years?—Jimmy Pitts, long in Johannesburg, Transvaal, is said to be in New York. Can anyone confirm?

"Meet \_\_\_\_\_, President of the \_\_\_\_\_ and Head of the Community Chest Drive. He has been in this city but a few years, yet he has made his presence felt, and he is consulted and he is sought in all matters which pertain to the betterment of the city." It is too bad we cannot include the photograph of the familiar face that went with the above advertisement. You have all met him—James P. Barnes. Jim has also been elected chairman of the Electric Railway Section of the National Safety Council. Through his influence, doubtless, the next annual congress of the council will be held in Louisville.

The annual mid-winter dinner on February 29, at Walker, was disappointing in numbers but successful in other respects. After dinner, there was a lively discussion of many matters of interest, especially the Swope Plan for increasing the tuition to \$800, Lewis and Fisher leading respectively the pros and the cons. Interest was so keen that everybody forgot the bowling scheduled for the second part. Present: Fred Abbott, Balkam, Buff, Damon, Davis, Donald, Ralph Emerson, Fisher, Gilman, Green, Johnson, Henry Keith, Lewis, Lord, Kenway, McLean, Marcy, Prescott, Strickland and Wentworth. It is planned to have an outing in June and it hoped there will be a stronger turn-out.

Banash, Bender, Bennett, Crosby, Files, Fouhy, Gilbert, Graesser, P. G. Hill, Motter and Rhodes attended the banquet of The Technology Club of New York in March.

Item Extraordinary! Banash has taken up golf. On a recent trip to Chicago, Bill Ball gave him his first lesson at the urging of Mrs. Banash who, report says, put it all over Bill. (1906, please copy.)

Bill Green is spending a good deal of time in his old home town, Gloversville, N. Y., doing consulting work on the tanning of glove leathers. At other times he is in Salem, Mass., with the Weldfast Co., which makes machines for wrapping and machines for electrically welding packages. There seems to be a promising future for the company.

Just as we had decided there was nobody left in North Carolina, Otis True reported from Greensboro, where he is associated with the Proximity Mfg. Co., one of the biggest cotton manufacturing concerns in the country. During the war, he was a Captain of Engineers, and, after the armistice, spent a year in Washington writing up histories of Engineer units. Then he was sent to Newport News and Fortress Monroe and was discharged (honorably) in the fall of 1920. Of his later history, he writes: "In 1921 I took a job as resident engineer and built a reservoir, filter plant and pumping station for the City of Wauseon, Ohio. This finished, I spent six months on



## 1905 Continued

some special work for the Department of Health, State of Pennsylvania. We came to Greensboro, N. C., in April, 1922, where I have since held the position of Sanitary Engineer, Proximity Mfg. Co. We have a good live city here, of over 40,000 people, and there is a progressive atmosphere throughout the state."

Through Huntington Smith, we hear of another who stayed in the army. Bob Beard is still in, with the address 114 Schofield Bks., Honolulu, Hawaii, Quartermaster Corps, Construction Division. Of himself, Smith says: "I have stayed with the Engineering Department of the Nickel Plate Road. Have been Assistant Engineer, Division Engineer and at the present time am Office Engineer (at Cleveland). Have one boy, now fourteen, a city house, a country place, an automobile and in general have no kick coming. The boy says he wants to go to Tech and I think he shows some signs of being able to make the grade."

Elmer Wiggins writes on the stunning stationery of The Viscoloid Company, Leominster, Mass.: "I have been up here with this company since last July. Same products as we made at duPonts (celluloid toilet articles, novelties, etc.) and more added. Had a chance to go in and learn the sales end and took it. Do a little traveling, mostly New England. Keep in pretty close touch with the operating end, also, for that is my strong point. Harrington is still in charge of the dye business for duPont, assistant director still, I think, but I have not heard a word from or about Gifford for ages."

We must regretfully announce that two more of our mates have gone. Joseph B. Marvin of Louisville, Ky., died last November at Saranac Lake, where he had been living for about fifteen years. While there, he was interested in research chemistry and had built up quite a laboratory. Charles Edward Broad died in February at San Francisco. Starting with '04, he dropped back on account of ill health and became a loyal member of our class, attending the first reunion at Newburyport. His business life was spent in the automobile industry, at one time being with the Stanley Co. in Newton.

## 1906

J. W. KIDDER, *Secretary*, 50 Oliver St., Boston, Mass.  
E. B. ROWE, *Assistant Secretary*, 108 Water St., Boston, Mass.

The Secretary is in receipt of a post-card containing the following announcement: "Perkins, Fellows and Hamilton of Chicago, Guilbert and Betelle, of Newark, N. J., and John J. Donovan of Oakland, California, Architects, announce an exhibition of photographs and drawings of their recent school work, to be shown in Rooms B34 and B36 of the Congress Hotel, Chicago, during the Convention of the Department of Superintendence of the N. E. A., February 24 to 28, 1924."

Andy Kerr dropped in to see the Secretary on March 6 with the interesting information that he expected to be present at the Annual Dinner of The Technology Club of New York to be held in the Waldorf-Astoria on the following day. We requested Andy to cover the dinner for the '06 notes, consequently he appeared on the 8th with a list of the following men who were present: Andrew Kerr, Charlie Howard, Stewart C. Coey, H. S. Whiting, B. W. Kendall, C. M. Emerson, J. W. Anderson, O. B. Blackwell, Colby Dill, Hans Isenberg, Albert W. Hemphill, J. I. Banash, and G. C. Furness.

This dinner was broadcast by a number of radio stations. In all probability a good many of the class were in on it. The Secretary listened for a short while and heard President Stratton and some of the other speakers, picking it up from Schenectady and also from Pittsburgh, but it faded badly and therefore could not be followed completely.

## 1907

BRYANT NICHOLS, *Secretary*, 2 Rowe St., Auburndale, Mass.  
HAROLD S. WONSON, *Assistant Secretary*, W. H. McElwain Co., Manchester, N. H.

Leon L. Allen, who has for several years been Clerk of the School Committee of the Town of Brookline, Mass., has recently been elected town accountant of the same place.—Arthur D. Clark, a member of the advertising firm, Wilson & Clark, 80 Boylston Street, Boston, Mass., is one of the progressive and aggressive men of the city in his line. His firm, although not very long established, is already handling many very desirable accounts.—James M. Gaylord is located at 611 Milan Avenue, South Pasadena, California.—B. C. Gupta can be reached by addressing 14 Elsmere Avenue, East Lynn, Mass.—Kenneth Moller, from the viewpoint of responsibility of position occupied, is one of the most successful men of our class. He is Vice-President of Lockwood, Greene & Co., Engineers and Managers, 24 Federal Street, Boston, Mass. The Secretary knows several men of this organization, and they are all unanimous in their

opinion that on account of his personality as well as his ability, Kenneth is respected and liked by all of his associates. Just at present, he is on a business trip to California.—William H. Sage, Jr., is located at 148 Clifford Street, Whitneyville, New Haven, Conn.

## 1908

HAROLD L. CARTER, *Secretary*, 185 Franklin St., Boston, Mass.  
LINCOLN T. MAYO, *Treasurer*, 181 Massachusetts Ave., Boston, Mass.

The bi-monthly dinner was combined with the Annual Meeting and was held on March 11, 1924, at Walker Memorial. While it was rather a disagreeable evening, as far as the weather was concerned, the following showed up: Linc Mayo, George Freethy, Doc Leslie, Carl Bangs, Cookie, Bert Cary, Schreifer, Eric Manning, Pop Gerrish, Carter, Myron Davis, Toot Ellis, and Bunny Ames. Newhall, Booth and Esten had planned to come, but bad weather interfered. Dinner was served at six-thirty in the Grill Room, after which we adjourned to the Alumni Room, where the Annual Meeting was called to order. Linc Mayo reported a very satisfactory financial condition for the class, as the response to his letter for help was good. When Linc took charge of the finances for the class, we had a balance of about \$38.00, but at the present time our balance is somewhat in excess of \$100.00, with all bills paid.

It was suggested that some definite form of entertainment be arranged for future meetings and Bert Cary very kindly offered to start the ball rolling by exhibiting some of the "Freak Patents" at the next dinner, which will be held Tuesday, May 13, 1924.

The following letters from some of the fellows will be of interest:

Paul E. Fernald, International Boundary Commission, United States and Mexico, American Section. "Your unpleasant letter of January 30 received. The prick of my conscience is long enough for one year of retrospection only. Hence I enclose check for \$2.00 covering 1923 and 1924. Am Assistant Engineer for the above commission, and for several months past have been surveying and monumenting a long stretch of the United States—Mexico Boundary, south of the Rio Grande in Texas. Explain this apparent incongruity and you will be awarded de la Huerta's chances for the Mexican presidency. Continue my address as Tucson, Arizona. It is the one place I always drift back to."

H. A. Rapelye, Manager The Diesel-Wemmer Company, Kansas City Branch, 110 West 11th Street. "Please excuse my tardiness in replying to your circular of January 30, 1924. Sure would like to see some of you old 'down-easters.' When this will be possible, no one can say."

John H. Locke, 4965 McPherson Avenue, St. Louis, Mo. "Very glad to hear from you and 1908 as well as your side-kick, Nick Carter. Enclosed you will find my check for \$1.00 and I feel as though it were well spent too. Out this way I scarcely see a Tech man, let alone one from '08. Once every few years somebody tries to get a few alumni together and the most recent occurrence was in December to meet O. B. Denison who is a very fine man to represent the Institute and I only saw one man from '08, and as I remember him he was a sort of adopted member—only coming to Tech for his last year or so. I would like to be able to see some of the old gang again, but I hardly ever get to Boston, except during the summer. With kindest regards to all."

Charles H. Morrison, 1040 Park Place, Brooklyn, N. Y. "After this, it will be: Dear Checkmate as you are now Treasurer. I hope you get a good response to your letter of January 30, 1924. That little bit about old man conscience pricking members in arrears of dues is good. I felt something the other day, but after getting monthly statements decided it was only a 'crick in the back.'"

Hap Ellis, 19 Pearl Street, Boston, Mass. "I have your appeal of January 30 with regard to the finances of our class at Technology. From the apparent condition of the class treasury I should say that we should deserve the sympathy even of the German Finance Committee. My best advice to replenish our funds would be to appoint a standing committee to engage in bootlegging or rum running on behalf of the class. Meanwhile, to buy a few pencils and stamps I enclose my check for a few years' dues, and for the life of me I can't remember whether I have paid any since the Civil War."

Johnson, Illinois Central Railroad Company, P. O. Box 434, Madisonville, Kentucky. "Enclosed please find check for \$2.00 for class dues. I am located with above railroad at this place on construction. My home address is 221 West 13th Street, Hopkinsville, Kentucky. With best of wishes for you and yours."

C. O. Brown, International Paper Company, New York City. "After that long-winded salutation, forgot what I was about to

1908 Continued

say, but think it was to advise you to count me in on one of those albums of the wet Fifteenth Reunion. I am sorry that they do not come oftener, (I mean the reunions). That little stay at Osterville was a peach of a starter for a very busy and pleasant summer, as I was up the White Mountain district all through the season and fall up to the first of December. The best time of all was after the crowd left and the hotels closed. You could go around the curves with the throttle wide open and be sure not to meet another fool coming toward you at the same rate. Will be up that way again about the first of June and will try to get in on one of those monthly gab-feasts you fellows have. Regards to the other Bostonians."

The albums of the Fifteenth Reunion have been delivered and thanks are certainly due Cookie for a fine job well done.

Congratulations are in order for Toot Ellis, who was recently made Treasurer of Lockwood, Greene & Co., Engineers.

## 1909

CHARLES R. MAIN, *Secretary*, 200 Devonshire St., Boston, Mass.

GEORGE A. HAYNES, *Assistant Secretary*, 186 Lincoln St., Boston, Mass.

All aboard! Fifteenth Reunion, Power Point Hall, Duxbury, Mass., Friday, Saturday and Sunday, June 20, 21 and 22.

Automobiles leave the Boston Public Library at 10:00 a.m. on Friday. The Committee will provide accommodations for those coming from a distance without cars who desire to go down to Duxbury over the road. If you can't join the automobile party, the New York, New Haven & Hartford will do its best to get you there by train. Nineteen hundred and nine busses will meet you at the Duxbury Depot.

John Willard has some road maps showing routes from Providence, Worcester and Boston. John's address is 20 Gammons Road, Waban, Mass. Write to him regarding transportation.

After you get to Duxbury, Art Shaw and Chet Dawes will see that you have a good time.

Send in the reply card at once, so that your Committee can make the necessary arrangements.

From returns already at hand, this promises to be the biggest and best reunion the class has ever held. Come early and stay late, and bring your wife. The Committee is planning a good time for the girls, too.

Through the courtesy of Chet Dawes, we quote from a letter from Phil Wentworth, now Manager of the Fort Madison Electric Company, Fort Madison, Iowa.

"I suppose I should address you as 'My dear Mr. Professor' but that title to me hardly fits the little shrimp who used to play my end on the '09 team. I was awfully glad to hear direct from you. Of course, I have known all along that you were alive and doing business, as I am continually seeing your name as one of the authors of some very expensive handbook or other, but it was good to get a confirmation letter.

"Your ideas of my job are magnified. My Packard limousine is only a decrepit Dodge at present, although, with the arrival of spring, I am hoping to step up to a Buick closed car. That will be a little closer, as only an expert can tell a Buick from a Packard across the street.

"I can give orders to my minions all right, but this Company only uses about twenty minions. However, the results, so far as orders go, is the same as in a larger company, the only difference being that I give out more orders per minion, but the total per day is the same."

Smut Nisbet has opened an office at 11 Exchange Street, Portland, Maine, under the firm name of Nisbet & Griffen, Inc., Surveyors and Estimators.

Marshall, Field, Gore, Ward & Co., recently announced that Henry R. Putnam has become associated with them in their department for the purchase of securities.

Charles R. Main is endeavoring, for the third year, to run the Town of Winchester, Mass., having been reelected last March to the Board of Selectmen. He was also recently elected as Director in the Boston Society of Civil Engineers.

## 1910

DUDLEY CLAPP, *Secretary*, 40 Water St., East Cambridge, Mass.

R. O. FERNANDEZ, *Assistant Secretary*, 264 West Emerson St., Melrose, Mass.

The April Review should be a very satisfactory number to the 1910 men, as it contains Spalding's photograph on page one (he put over the Radio Dinner in New York) and an article on George McRae under "Tech Men in the Public Eye" (he is Chief Engineer of the New York Telephone Company).

The following is of interest, from the *Providence Tribune* for February 24. It accounts for Taylor very well.

"Wide interest is being centered upon the course in radio

instruction that was opened recently at the Y. M. C. A. here, with Horace V. S. Taylor, the noted radio expert, as the instructor. Mr. Taylor is to open a similar class at the Pawtucket Y. M. C. A., next Thursday. In this city, weekly classes will be held on Tuesday nights.

"The opening of the course last Tuesday night was attended by a well-filled class, with representatives attending from a wide field. The ages of the attendants ranged from 15 to 70 and included all types of men, among them being students, lawyers, judges, social workers, professional men, radio dealers, and battery dealers. Fourteen localities were represented, including Bristol, Woonsocket, Attleboro, Mass., East Greenwich and Peacock, Mass.

"Mr. Taylor is a graduate of Yale University and Massachusetts Institute of Technology. He is President of the Taylor Electric Company, co-founder of the radio section of the Westinghouse Electric Company and was for two years Chief Electrical Engineer of the D. & W. Fuse Company. He is a member of the American Institute of the Electrical Engineers and of the Association for the Advancement of Science."

The *Boston Herald* for February 28 records the activities of another classmate:

"Edward Stuart of Boston, formerly connected with the health education division of the Rockefeller Foundation, has been appointed research associate of the American Child Health Association. He will join the group of public health specialists now engaged in making a survey of 86 cities of between 40,000 and 70,000 population to determine the status of child health in the United States.

"Mr. Stuart is a graduate of Massachusetts Institute of Technology, Class of 1910, in sanitary engineering, and later of the Harvard Technology School of Public Health."

The Secretary received a note from John G. Ahlers, 110 West 40th Street, New York City. Ahlers is speculating as to the possibilities of 1910 luncheons in New York City.—Robert B. Allen dropped a line from Detroit.

From Seattle, Washington, under the letterhead of the "Anderson Supply Company," Maurice P. Anderson, President, another 1910 man accounts for himself: "Your letter of March 8 at hand; and I am glad to learn that the Class of 1910 is not totally extinct, as I had supposed.

"Except for that hectic period now referred to as the late war, during which time I rode a desk chair in the Army of Potomac Park, Washington, D. C., I have been situated for the most part in Seattle, where I am still engaged in the photographic supply business. This is without question a long cry from naval architecture; but, after all, photography is coming more and more to be recognized as useful by engineers. At least, that is the case with those engineers who have come in contact with the writer.

"My business is situated next door to the main office of the Western Union Telegraph Co., and I am often visited by Tech men who happen to be passing through the city, many of whom stumble upon me by chance. I am always glad to spend a few moments with such visitors and frequently find that my familiarity with this section of the country enables me to be of some assistance to Tech strangers in our city.

"About the only direct or material return I received from my sojourn at the Institute was the acquisition of a good wife. "Merchandising is much to my liking, because it is interesting in itself and also, perhaps, because it has proved a reliable source of livelihood.

"There are about fourteen hundred miles of splendid road, 90% of which is paved, connecting the government dispensary at Vancouver, British Columbia, with the longest bar in the world at Tia Juana, Mexico. Such fortunate members of the Class of 1910, who hastily travel this arid highway from one oasis to the other, will probably want to send a telegram from Seattle, reporting general condition, etc. On doing this, be sure to drop in next door and say 'hello.'"

From Arkell, the following: "Your courteous favor of the 8th has been received. There isn't much to write. I am still with the Beech-Nut Packing Company, of which I am Secretary.

"Have added a young lady to the family and now have three: Bill, aged nine; Mary Carolyn, aged seven; and Sally Jane, aged fourteen months." That may not be much to write, but what there is, is great.

Kenneth Armstrong writes from Washington, D. C., 2029 Rhode Island Avenue, N. E., North 730: "Am enclosing recent issue of a local publication which will give you a line on my present activities. Will endeavor to write more in detail later."

The enclosure referred to is a local paper, from which the Secretary gathers that our classmate is a very active and popular citizen of the community. It doesn't say just that, but Armstrong is on committees, is director of a building association, etc. His position with Woodward & Vieth is sales manager.

You may note that many of the above communicants rate



1910 Continued

high alphabetically (and otherwise). The Secretary has written to the first fifteen and replies are coming in fine. We all thank you!

## 1911

ORVILLE B. DENISON, *Secretary*, Room 3-207, M. I. T., Cambridge, Mass.

JOHN A. HERLIHY, *Assistant Secretary*, 588 Riverside Avenue, Medford, Mass.

While our Secretary is out West or up North running up an expense account for the Alumni Association, visiting his friends and keeping two clerks busy at Raymond & Whitcomb's, all under the guise of working for a living, along comes a call for ammunition for *The Review*. The request was passed along to the Assistant Secretary for a little action (little is good), but it would not surprise me if Dennie came across with a couple of pages of live stuff picked up in his travels. At least, if you find two sets of notes this month under 1911, this is the explanation.

We learn from a recent issue of the *Textile World* that "George H. Estes has been appointed assistant agent of the Continental Mills, Lewiston, Maine. He is a son of Henry B. Estes, Treasurer of the mills, and a graduate of the Massachusetts Institute of Technology. He has been with the Continental Mills for the last twelve years."

Another bit of news is the promotion of S. B. Dyer to Assistant Mechanical Engineer of the B. & M. R.R. In reply to an inquiry, we are told that S. B. still plays the guitar.

\* \* \*

[The following material has likewise been received from Mr. Denison. Ed.]

While writing these notes (late March) I am way out on the Pacific Coast, enjoying to the full the hospitality and natural beauties of Oregon. Never in my life have I realized before the real extent of Western hospitality, but it certainly has been brought home to me forcibly by the way these local clubs west of the Mississippi have welcomed me in my mission as Executive Secretary. It's wonderful!

Just before starting on this Far-West trip "friend wife" and I went over to New York and attended the epoch-making radio dinner of The Technology Club of New York at the Waldorf-Astoria. There were a goodly number of Eleveners there and it was just fine to renew old acquaintances. Under the guidance of our popular Senior President, Don Stevens, the boys accorded me some enthusiastic cheers during the evening, which surely were much appreciated by yours truly.

Mrs. Denison spent the week-end with friends of ours near New York and I started for Kansas City via Chicago on Saturday, March 8. It sure was great in Kansas City to see our old friend, Theodor Polhemus, who is located there as agent for Missouri, Kansas, Oklahoma and Arkansas for the Empire Tire & Rubber Company. There is only one '11-er in Denver, to the best of my knowledge, and unfortunately I found that he, William B. Ives, was ill and unable to see me. Of course, I left hearty greetings for him.

I found no classmates in Salt Lake City, but in Los Angeles it was quite a different story. It is, of course, obvious that I made my headquarters in that fair city with Charles (Gutzie) Barker, my old side-kick and thesis-mate, and his charming wife. Yes, yes, there was much reminiscing and the like (particularly the like). Charlie is local agent there for B. F. Sturtevant Company. I also had a delightful contact with J. P. Hart, who is now in the firm of Farris Brothers & Hart Stone Company, cast stone contractors.

I also got in touch with S. C. (Vic) Willis, who is with the Dwight P. Robinson firm of engineers, engaged in a project at Seal Island in that vicinity. R. D. Van Alstine, city engineer of the city of Long Beach, was tied up in a knot, figuratively speaking, since a group of Army Engineers were visiting the locality from Washington, D. C., so that I was unable to see him. I also was deeply sorry to find H. C. Frisbie and A. C. Pillsbury both away from the city at the time of my visit.

While in San Francisco, I visited the University of California at Berkeley and had lunch with some of the Tech men who are professors there. I was delighted to find included in the party E. C. Tolman, who has forsaken the fields of engineering and is now on the staff of the Psychological Laboratory of the University. We had not seen each other since 1911 and it certainly was a fine renewal of acquaintance. Here in Portland I have had delightful contacts with two 1911 architects — H. A. Angell, who is with A. E. Doyle, a local architect, and Ormond R. Bean, a member of the architectural firm of Lawrence and Holford, both of the latter-mentioned Tech 1901 men. Angell says he will have an interesting announcement to make through these pages in the near future, as he is planning to go in for

himself in architecture. At the business session of the club here, Angell was, I am delighted to announce, elected President for the ensuing year.

Before getting back East, I expect to meet several more '11-ers in Seattle, Spokane, Butte, Richmond, Va., and Baltimore. As I have said several times before, one of the real delights of these trips to the alumni clubs has been and is the contacts I am making with classmates.

## 1912

F. J. SHEPARD, JR., *Secretary*, 568 East First St., South Boston, Mass.

D. J. McGRATH, *Assistant Secretary*, 17 Gramercy Park, New York, N. Y.

Only one more issue before we suspend publication for the summer, so send in any news that has come to hand, that we may hurry it on to your hungry classmates.

The *Springfield Union*, for February 24, carries a large cut and lengthy description of Radio Broadcasting Station WQAE of Springfield, Vermont, owned and operated by E. B. Moore, VI. This is the only active broadcasting station in the State and sends on a wave length of 225 meters, equivalent to 1090 kilo-cycles. Tune in on E. B. some night and see what he is putting out.

The New York bunch of snappers held their regular monthly luncheon at the Tech Club on Thursday, March 20. Ten were present: Priest, I; Williamson, I; Payson, I; McGrath, I; N. A. Hall, VI; Appelquest, VI; Freeman, VI; E. M. Mason, VI; Cook, VI; and Cooper, VI. Course I and VI seem to be the roots and trunk respectively, but we'd like to see a few tender shoots from some of the other more modest and retiring courses, with which the 'State is afflicted.

Letters were read from various absentees, but not forgetful members. Doc Wiseman, VI, sent in an epistle headed, "On board S.S. Olympic." This lucky goof is off on a three-month trip in Europe on the expense account of the Okonite Company. His itinerary includes England, Holland, Germany, France and Italy. He did not say much about the business he is on, but we assume when he isn't looking over the French mam'selles and the Deutsche Frauleins, he will be picking up a few foreign tips on wire and cable manufacture.

A letter from Gene Marceau, X, explained that his firm, the N. K. Fairbanks Co., requires his presence at their Eastern Plant, situated at Guttenberg, New Jersey, so he is unable to attend regularly the week-day luncheons, but will try to get around to some of our other activities.

P. L. R. Flansburg, VI, has been reported as residing at Pompton Plane, New Jersey, and in the employ of the Western Electric Company, New York. This bird's name, therefore, goes on the official list for notices of the New York meetings.

A letter from Dave McGrath states that the good turn-out for the dinner on the 24th of January did not discourage the New York crowd at all, as they reported seventeen present at the monthly luncheon held on February 14.

They are now planning to arrange a bang-up outing to take place early in the summer, with J. G. Cook, J. C. Freeman, and H. W. Danser, as committee, to see that proper preparations are made. Everybody should start saving railroad fare at the present time in order to take advantage of the coming attraction.

Henry A. Babcock, who has been in the Middle West for some time, was at the luncheon, en route to Europe to study paper pulp manufacturing conditions in the Scandinavian countries and Germany. A complete account of his recent doings follows:

After graduation, he was two years in sales engineering, handling ventilating equipment, but thirsting for further engineering knowledge, he obtained a Ph.D. in Physics, at Northwestern University in 1916, and followed this up with further research work regarding the specific heat of liquid ammonia, acting also as Instructor in Physics at Northwestern.

During the war, he served in the air service, A. E. F., for two years, seeing a great deal of active service in France.

Upon receiving his discharge, he returned to Northwestern University, as Associate Professor in Physics, where he remained until 1921, when he associated himself with the Interlake Pulp & Paper Company, Appleton, Wisconsin. As stated above, he is now en route to Europe to discover whether or not we are missing anything in this country as regards proper technique. In 1917, Bab married Ruth Boltwood, and now boasts two daughters, Virginia and Barbara, aged four and two years, respectively.

The date of the next New York luncheon is set for Thursday, March 20, and any out-of-town men are urged to drop into the Technology Club in Gramercy Park.

W. H. Baxter, III, now with the Semet-Solvay Company, of Syracuse, was in New York recently, lining up some new



## 1912 Continued

proposition which he expects will permanently locate him in the large city.

Link Barry, VI, has left Taunton, and is now Treasurer of the Cynthia Mills, 16 New Street, East Boston, Mass. The Cynthia Mills is an old established concern manufacturing lace, and Link is injecting new life into the concern. He is living at 517 Commonwealth Avenue, Newton Centre, Mass.

Business is picking up! Captain Howard F. Clark, U. S. A. I. comes through with a letter and biographical sketch, as follows: "The items under 1912 seem a bit scant in the March issue of The Review. After receiving several invitations to participate, here goes.

"I think you are the most recent member of the class whom I have seen, even though it was in June when I was in New York for a few days and saw you at the Technology Club. I was then stationed at Chester, Pa., in charge of the hull work on four sea-going dredges for the corps of Engineers. Two of these dredges, each 256 feet long, and holding 1200 cubic yards in their hopper capacity, were launched in November. My work was transferred to Charleston, West Virginia, about that time, and here I will be for at least a year, in charge of some dredges for the Ohio River.

"The shipyard here is far different from those on the Delaware, boats being side-launched, and after launching, being subject to flood states of the Kanawha River. There was about \$600,000 of work under way when I arrived in November last, but since arrival, we have delivered a 100-foot Diesel Towboat for Mobile District and a large number of castings for Muscle Shoals Dam. The remaining work is a 120-foot towboat and a 24-inch non-self-propelled dredge drawing 5 feet of water and 50 x 175, costing in the neighborhood of \$400,000 when complete. This is entirely Diesel-Electric, there being no steam aboard. The vagaries of shipbuilding are multitudinous, and when one thinks of some of these boats as completely outfitted as a passenger liner, one needs to be versed in every branch of engineering, rather than a graduate of Structures in Course I.

"My three years in the Military Science Department at the State from 1919 to 1922 were very pleasant, and I regretted leaving Cambridge, though the school detail was not as interesting but more pleasant than ship construction.

"I am now in my seventh year in the Army and constantly enjoying the vicissitudes of changing rank to meet appropriations made by Congress. About the time you receive this, I will be a Captain again in the Corps of Engineers."

Attention, men! Here's what we want you to really absorb in your hasty perusal of these timely topics. A 1912 Outing is in course of preparation. The exact date is to be announced later, but it will probably be Saturday, June 14. Free transportation on an excursion steamer, leaving Battery Park, New York, at 9:00 a.m., for Long Branch, New Jersey. A shore dinner at Long Branch, and an afternoon of swimming, sports, games and other pastimes. Ladies invited. Return to New York, Saturday evening. Only expense will be the shore dinner, and you can bring your own instead if you want to. Help us to make this a big party, not just a local affair. You other boys will find it worth while to come over from Philadelphia, Baltimore, Boston, and way stations, for this party. Write the Assistant Secretary and get the latest details. Let's make this a kind of unofficial class reunion.

## 1914

H. B. RICHMOND, *Secretary*, 100 Gray St., Arlington, Mass.

G. K. PERLEY, *Assistant Secretary*, 45 Hill Side Terrace, Belmont, Mass.

The news of the reunion must have given renewed interest in 1914 affairs, as three successful meetings were held during the past month. The first was the regular Boston monthly luncheon held on March 4. Perley outlined the plans for the reunion and Tallman gave an interesting talk on the subject of public utilities. Those present were Tallman, Adams, Waitt, C. H. Wilkins, H. S. Wilkins, Johnson, Crocker, Blakeley, Atwood, Harper and Perley.

On March 5, due to the good work of Sousa Brooks, fourteen Fourteeners were gathered together for dinner at the Arena Restaurant on Forty-sixth Street. This meeting was called particularly to present information regarding the reunion. There was a fine get-together spirit and it looks as if the New York contingent will be much in evidence at the coming reunion. Those present were Brooks, Affel, Horton, O. C. Hall, Besosa, Dickson, MacFarlin, Wenty, Callahan, Snow, Owen, Fox, Leathers and Richmond.

The All-Technology dinner held on March 7 at the Waldorf-Astoria found twelve Fourteeners present. This was a very representative meeting of the New York Fourteeners and speaks well for the enthusiasm in that section.

This is the last issue of The Review before our reunion. Our own paper, *The Fourteen Pointer*, will be relied on to carry further tidings. As Buck Dorrance has written, "There is no decision to be made. Every Fourteener who can go, will go." We certainly anticipate a large attendance, and the reunion committee has stunts arranged for all.

The great news of the month came from our President. The soup business has passed out of Buck's life for the present; the only item of interest is Arthur Calbraith Dorrance, Jr., born at Philadelphia on March 3. As Buck wrote that everything was coming along nicely, we are just waiting to see his usual genial smile spread all over the reunion.

Given up for lost, our ex-Secretary, C. J. Callahan, turns up in New York with the official title of appraiser. Cal states he is in business for himself at 120 Liberty Street and that he is willing to try appraising anything, once.—Charlie Fox, another long lost member of our fold, has been located at 417 Lafayette Street, New York, where he is engaged in the printing business, consisting largely of foreign newspapers. That is why Charlie was willing to undertake our own paper.

A. C. Besosa, who for seven years after graduation was in South America, has returned to New York and is affiliated with the International Labor Savings Products Co. Labor saving machinery is their specialty. Besosa claims his company's match-making machine is the fastest on the market.—Kirk McFarlin is now with the National City Bank at New York.

While in New York during the Radio Show, your Secretary met many Fourteeners who seem to have been bitten with that fatal bug. Even Ross Dickson, who is supposed to invent new oils for John D's company, is quite an expert on the various kinds of "dynes" including the latest model of "Koo-Koodyne." Ross and your Secretary even went to a lecture together on some kind of dyne, but as they had previously been dining with Sousa Brooks, the exact circuit was not entirely clear.

Les Snow, who is with the Chase Securities Corp. in New York, is still on the lookout for any Fourteener with funds to invest. His namesake, W. A. Snow, is still prosperous down at Miami and has recently been forced to take larger office quarters. Snow writes that L. S. Hall who, with his family, is spending the winter at Miami, dropped in recently for a pleasing visit. It is encouraging, at least, to know that one Fourteener is able to enjoy the pastime of sojourning at Miami for the winter.

Ed Bowler has been quiet for along time, but we have his address at last. He is up at the New Hampshire State College with that formidable title of Assistant Professor of Mathematics.

We had supposed Bob McMenimen was safe with the Raymond Concrete Pile Co., in New York City, but word has just arrived that he escaped from the Japanese earthquake in Tokio, where he was carrying on construction work for the Shibaura Engineering Works.

No issue is complete without a resumé of the current newspaper clippings regarding Pat Adams. The airplane flight around the world is the subject this month. Another Fourteener, Don Douglas, has been very intimately connected with this project. The following abstracts give some idea how closely associated 1914 is with this round-the-world-flight: "Two Tech students dreamed and planned for a flight around the world, some eight years ago. They were roommates and classmates at M. I. T.

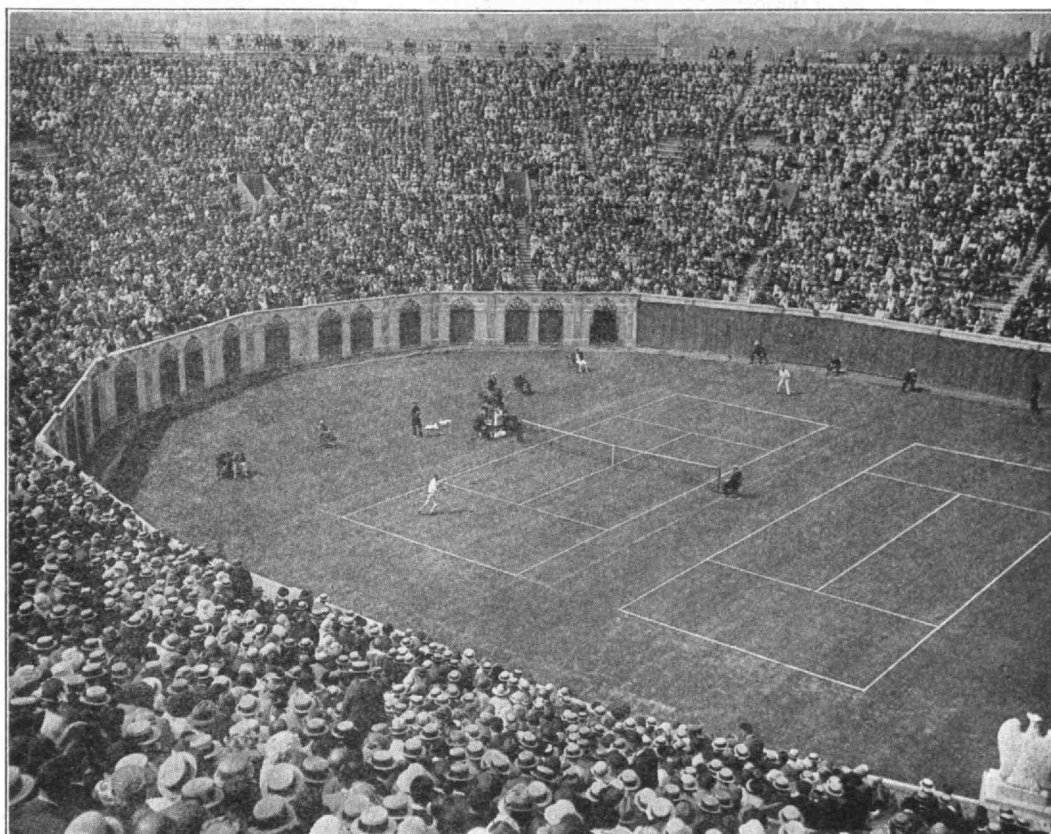
"A year later, they again met, out on the Pacific Coast, and began building an air cruiser to carry out their schoolday dreams. The war interrupted their plans, though one of them, Porter H. Adams of Brookline, had invested in the vicinity of \$100,000 in designing the ship and organizing an advance party to establish bases for fuel and supplies in various foreign lands.

"The other romancer, Donald W. Douglas of New York, has since become one of the best known aeronautical engineers and builders of aircraft the world over. As a result of his early dreams and experiments, together with the Brookline youth, the huge Martin Bomber is flying today, the greatest ship ever produced, capable of lifting off the ground with tons of useful load.

"And the fulfillment of the dreams of Adams and Douglas is but two weeks hence. Then, a group of airplanes built by Donald W. Douglas for the United States Army will leave Washington, D. C., on the first leg of a round-the-world flight."

"Just as Adams and Douglas designed their air cruiser to land on sea or ice, the round-the-world planes now ready for this flight have been equipped with pontoons as well as landing gear. And those who ridiculed the thought of such an expedition but eight short years ago are convinced of its feasibility today.

"Porter H. Adams, who lives with his mother in a beautiful brown stone house at Warwick Road and Beacon Street, Brookline, has not forgotten the laughter and fun poked at his project in 1916. Then, as now, he talked about big ships, though most



**THE WEST SIDE TENNIS CLUB STADIUM, FOREST HILLS, LONG ISLAND**  
**DURING THE DAVIS CUP MATCHES**

KENNETH M. MURCHISON, ARCHITECT

CHARLES S. LANDERS, ENGINEER

AMERICA'S Tennis Stadium at Forest Hills, Long Island, was built by The Foundation Company in record time. It was begun in April and completion was promised for the Davis Cup Challenge Round on August 31, 1923. It was actually used for the Women's Nationals on August 13. The West Side Tennis Club, in choosing a general contractor, selected The Foundation Company because its record guarantees trustworthy workmanship and speed of construction without sacrifice of economy.

*The Foundation Company* is an organization of construction engineers specializing in the building of difficult superstructures and substructures. The world-wide reputation gained in its early history for trustworthy underground construction has followed it into the field of general engineering contracting. Among the structures completed by The Foundation Company are *buildings of every known type.*

## THE FOUNDATION COMPANY

### CITY OF NEW YORK

Office Buildings • Industrial Plants • Warehouses • Railroads and Terminals • Foundations  
 Underpinning • Filtration and Sewage Plants • Hydro-Electric Developments • Power Houses  
 Highways • River and Harbor Developments • Bridges and Bridge Piers • Mine Shafts and Tunnels

CHICAGO  
 PITTSBURGH  
 ATLANTA

SAN FRANCISCO  
 LOS ANGELES  
 MONTREAL

LIMA, PERU  
 CARTAGENA, COLOMBIA  
 MEXICO CITY

LONDON, ENGLAND  
 PARIS, FRANCE  
 LOUVAIN, BELGIUM

**BUILDERS OF SUPERSTRUCTURES AS WELL AS SUBSTRUCTURES**

1914 Continued

folks thought the limit had been reached in size and carrying capacity of airplanes."

"Adams did the entire financing for the first round-the-world project. He encouraged Douglas to continue air craft building and assisted him with many of the ideas which are to be found in the finished 'Douglas World Cruiser,' four of them having now been delivered to the army for its attempt to carry out the flight which Porter Adams abandoned to enlist as a naval flier at the outbreak of the World War."

Remember! June 6, 7 and 8!!!

## 1915

FRANK P. SCULLY, *Secretary*, 118 First St.,  
East Cambridge, Mass.

HOWARD C. THOMAS, *Assistant Secretary*, 100 Floral St.,  
Newton Highlands, Mass.

The following welcome communication was received from A. E. Sampson: "Enclosed find the last station to report on the N. Y. Alumni Meeting of March 7 and you may be willing to 'broadcast' the dope to backsliding '15-ers through the medium of The Technology Review."

"A most interesting time was enjoyed by all and the broadcasting proved extremely successful. As the evening passed on, station after station checked in, and just after the close of the meeting (12:30 a.m.) California came in with a flood of congratulations. London, England, responded early about 11:00 and, of especial interest to 1915, Mary Rice, nee Plummer, wired in at 11:13 from the Mid-West. Those present were: C. W. Williams, I, c/o Frederick Snare Corp., 114 Liberty Street, New York City.—C. F. Wolf, I, c/o Nelson & Landgren Co., 1623, 61st Street, Brooklyn, N. Y.—St. Elmo T. Piza, IV, 17 Gramercy Park, New York City.—E. R. Stearns, I, 150 Orchard Street, Newark, N. J.—Gilbert L. Peakes, XIV, 82 Market Street, Box 67, Perth Amboy, N. J.—A. E. Sampson, V, 113 High Street, Boston, Mass.—C. H. Durkee, II, 2425 Grand Concourse, New York City.—Guernsey A. Palmer, II, Houston, Texas.—James A. Tobey, IX, National Health Council, 370 Seventh Avenue, New York City.—G. Harold Warfield, I, c/o Coverdale & Colpitts, 66 Broadway, New York City.—J. S. Fogerty, VI, Box 125 Hazleton, Pa. "I spend my spare time steering volts over the Pennsylvania hills."—A. V. DeBeech, VI, 600 W. 59th Street, New York City. "If this gang knew I had anything to do with the subway, I wouldn't have a friend left!"—Jerry Coldwell, VI, University Club, Bridgeport, Conn. "To Frank: You had a hell of a nerve to slide off and get married before I had a chance to get into the race."—V. Sanchelli, I, 47 West 43rd Street, New York City. "Busy constructing human spines back to normal. Engineering on humans is harder than bridging gulches."—William B. Spencer, IV, 37 West 25th Street, New York City. "Never let your children go into the building business. It makes you bald headed beating the unions."—H. B. Pickering, I, Arlington, N. J. "I'm like the fellow that grabs an electric wire. I can't let go—I've got a business I can't let go!"—Francis E. Stern, VI, Hartford, Conn. "All the brains are left and right of me. Mine only work by radio."

Henry Daley, II, writes the following from 2061, 65th Avenue, Philadelphia, Pa.: "Your recent calls for 'Help' have reacted just like the water from the well-known duck's back as far as I am concerned. However, I have seen the light and promise to help retard the growth of gray hairs in the genial Secretary's head. First of all, I want to tell the world and its adjacent suburbs that our family has been increased recently to the extent of one boy. I now have two boys to help wear out my cast-off clothes. Am still peddling around power apparatus in the Philadelphia district for the B. F. Sturtevant Co. of Hyde Park, Mass. We have just removed our Philadelphia sales office across the river into Camden, N. J., where we have opened a fine branch factory."

"Outside of Philadelphia I seldom bump into any '15 men. Guthrie, II, who is with the Abrasine Co. and myself, together with our better halves, get together pretty often. I also bump into Schoeppe, IV, frequently at the monthly meeting of the Technology Club. He is in the architectural game for himself."

"Met Frank Wall and Jim Franks, II, recently. Both are located in Philly; Wall is with the Oakley Chemical Co., as district manager, and Franks has become associated with a new company in Philadelphia, manufacturing an automobile accessory. Also ran into Lawrence Bailey, X, at a Tech meeting during the fall. See Findlay Downs frequently, whom some of the Course II men will remember in their sophomore year. Understand he has recently been absorbed into the firm of Day & Zimmerman, Engineers."

"That's about all I have for news, and in closing I wish that some of the old crowd, such as Jack Dalton, Larry Quirk, Les Morse, et al, would make their presence known occasionally."

Gabe Hilton writes the following from Wisconsin Parts

Company, Oshkosh, Wis.: "Your pitiful appeal for help certainly got under my skin, but what I cannot figure out is whether the terrible strain of holding down the Secretary's job was sufficient to drive you into the state of matrimony or whether you just naturally did not know when you were well off. Anyway, you will find that the first fifty years are the hardest. In spite of the foregoing, I wish you all the luck and happiness in the world. Anybody who will take on the class secretary's job certainly deserves no small measure of compensation in other fields."

"Now for something that may prove of interest to the other constant readers of our class letter. Like most of the rest of the boys in Course III, I started out to chase the illusive dollar underground in Mascot, Tenn., Miami, Okla., and Globe, Ariz., but the War came along and nipped in the bud the career of another young, rising, mining engineer. Anyway, after I got back, Oshkosh looked pretty good to me, so I decided to stay here for a while. I got in with a small truck axle company and have been here ever since. I worked through the Cost and Service Departments into the Sales, and am, at present, doing both Service and Sales work. This takes me all over the country, but most of my time is spent between Chicago and the East. I get as far as New York five or six times a year and occasionally up to Boston, as you know."

"Strange as it may seem, in all my travels I have run into very few of the old gang. I did have a very pleasant visit with Joe Livermore on the train between Milwaukee and Chicago. He is working out of Chicago with some large construction company. Ran into Jack Dalton in Pittsburgh, where he is in charge of some eastern insurance company's business there. Had dinner with Burr Swain and his wife in Syracuse about six months ago, where he is representing the Jenkins Valve Company. I bumped into Vic Enebuske in New York during the Automobile Show last month, but did not have time to find out exactly what he was doing. Have always managed to see Arch Morisson whenever I got to Boston, as well as Easty Weaver. That is about all."

"It is most peculiar how those things go. Sometimes in the most unexpected places you bump into the last person in the world you expect to see, and you decide that the world is not so big after all. On the other hand, when you are just craving for the sight of a familiar face, you do not see a soul and so it goes."

"In one more year our Tenth Reunion rolls around. Let's make it a good one! You can count on me."

Les Morse writes from 1107 Riverside Drive, Dayton, Ohio: "Well, as Goldberg says, 'they all flop sooner or later.' No one left of the old gang now but Andy, and I guess he's willing to join."

"I haven't much of interest to note. I am attending the Air Service Engineering School at McCook and trying to absorb some dope on motors, engine design, airplane design, radio, etc. There are only eleven in the class and I was really quite lucky to be able to take the course. The course started on August 15 and lasts until August 1, 1924. After that, I don't know where I'll be. I may get some foreign service. To date, my sole foreign service has been in Louisiana and Texas."

"We have a basketball league of eight teams here at the field and so far we have won seven out of eight and are at the top by one game. Have hopes of finishing there, but have lots of competition. We played six games without a substitute, as we couldn't get one. We have a total of eleven to choose from and only five came out."

"I wish you wouldn't work your men so hard. I haven't heard from George, except for an Xmas card, in a couple of years and you know he is a wonder when it comes to writing."

"Haven't heard from Andy for some time. Last I heard he was at Oswego for a short time. I guess as long as the Hudson flows, Andy will be digging tunnels under it."

"My Sonnie is coming along fine. I have taken him to a couple of basketball games and he gets very excited."

"One of the boys here at the school has been picked to fly in the next Pulitzer Race, which is to be held here at Dayton in September. They are talking about flying two hundred and sixty miles an hour about four hundred feet with slightly accelerated motion. We have a couple of new pursuit planes here capable of one hundred sixty-five or one hundred seventy miles an hour and climb from the ground at the rate of 2500 feet per minute. They loop and gain altitude with each loop. At the races at St. Louis one of the boys went around the pylons almost dragging one wing on the ground and the plane almost in a vertical bank. He also flew it across the field on his side."

"It is quite interesting here at the field to see all these new planes coming in and to see the improvements that are being made, such as wing radiators, consisting of a sheet of copper, with very fine corrugations, conforming to the contour of the wing which add about fifteen miles per hour, and steel and





## For the man beyond the campus

**FIFTEEN YEARS AGO** Joseph French Johnson, who was, and is, Dean of the School of Commerce, Accounts and Finance of New York University, found himself faced with a problem to which there was no satisfactory answer.

He was constantly in receipt of letters from business men, many of them occupying places of executive responsibility. The letters asked such questions as these:

*"What books shall I read?"*

*"Can you lay out for me a course in business economics?"*

*"How can I broaden my knowledge of salesmanship, or accounting, or factory management, advertising or corporation finance?"*

Those were pioneer days in the teaching of Business. Dean Johnson, wishing to help, yet feeling keenly the lack of suitable facilities, conceived the plan of a faculty including both college teachers and business men, and a Course so arranged that any man might follow it effectively in his own home.

Thus began the Alexander Hamilton Institute. Dean Johnson has continued as its President; its Ad-

visory Council includes these men:

DEXTER S. KIMBALL, Dean of the Engineering Colleges, Cornell University; JOSEPH FRENCH JOHNSON, Dean of the New York University School of Commerce; GENERAL COLEMAN DUPONT, the well-known business executive; PERCY H. JOHNSTON, President of the Chemical National Bank of New York; JOHN HAYS HAMMOND, the eminent engineer; FREDERICK H. HURDMAN, Certified Public Accountant; JEREMIAH W. JENKS, the statistician and economist.

To young men of college age, the Institute says: "Matriculate at a college or university if you possibly can; there is no substitute for the teacher." To older men, the universities and colleges, in turn, are constantly recommending the Modern Business Course of the Institute.

It is a Course for the man beyond the campus; the man who is already in business and cannot leave, the man who wants to supplement his college education. If you are such a man, may we send you, without obligation, a copy of "A Definite Plan for Your Business Progress?"

It tells how 200,000 men have profited by a business training founded upon university principles, and conducted in accordance with university ideals.

THESE COLLEGES and universities, and 80 others, use parts of the Alexander Hamilton Institute Course in their classroom work.

Amherst College  
Boston University  
Brown University  
Bucknell University  
College of the City of New York  
Columbia University  
Cornell University  
Dartmouth College  
Georgetown University  
Georgia School of Technology  
Lafayette College  
Massachusetts Institute of Technology  
McGill College  
New York University  
Northwestern University  
Ohio State University  
Pennsylvania State College  
Syracuse University  
Trinity College  
University of Alabama  
University of California  
University of Chicago  
University of Indiana  
University of Michigan  
University of Pittsburgh  
University of Texas  
Vanderbilt University  
Virginia Polytechnic Institute  
Washington and Lee University  
Williams College  
Yale University

## Alexander Hamilton Institute

In Canada: C. P. R. Building, Toronto



In Australia: 42 Hunter Street, Sydney

**ALEXANDER HAMILTON INSTITUTE**  
88 Astor Place New York City

Send me at once the booklet, "A Definite Plan for Your Business Progress," which I may keep without obligation.

Signature..... *Please write plainly*

Business Address.....

Business Position.....

1915 Continued

duralumin propellers which add ten or twelve more because the blade starts at the hub instead of a foot out. If you come out this way sometime, we have a lot of new planes to show you.

"How are all the old bunch these days? I never hear from any of them. I'd like to be around for a reunion and see them all again."

Here is a letter from R. B. Stringfield, X, Akron, Ohio: "Your valiant efforts make me come to life about once a year, though about all we think in this metropolis is rubber and that's of questionable interest to the rest of the bunch. Good-year, however, is still on the map, and when all you fellows discover how much easier riding your Packards is on balloon tires and that you can now get them to fit the present rims, we'll boost our production up to 40,000 tires a day to take care of you. At present, we're only making 30,000, but that along with the 275,000 pairs of heels a day that Herman Morse and Kimball and their gang turn out along with other things, keeps twenty-six out of the fifty-seven Tech men in Akron pretty busy.

"Dr. Stratton and Denison were in Akron a couple of months ago and a good bunch (everyone who was in town I think) turned out for them.

"Dennie spent the night at my place and showed his customary versatility by taking most of the money away from the others who spent half the night there. However, he claims the profits go to Mrs. Denison, so it's in a good cause.

"As this is written, A. D. (Spike) Wheeler, who is Assistant Superintendent at the Toronto plant of Goodyear, is seriously sick with pneumonia and heart complications. Hope you will have better news from him soon.

"This finds me still in charge of the Service Laboratories (Chemical and Physical Testing) at Goodyear, which also keeps my finger in much of the compounding and other changes around the plant. I get most of the new technical men that are on, to break in for a few weeks, and at the rate the rubber industry is developing, there is no danger of a lack of interesting work for a long time to come. Bridgeport is the nearest I've been to Boston since graduation, but I hope to get up there sometime this year. If any of the gang ever get near Akron, we'll be more than glad to see them either at home or at the plant."

## 1916

D. N. BARKER, *Secretary*, 14 Marathon St., Arlington, Mass.

It is interesting to note how so many of you '16-ers forget to write me. The men who were the most interested in the class while at M. I. T. are the poorest writers, having lost all interest in 1916. Maybe next year after the election they will all wake up. I had a very pleasant chat with Coffin, the hardware king of Melrose a short time ago, and he advised me that, while he was not a millionaire, he was making good.

W. S. Chandler of Springfield, Mass., writes as follows: "I have never sent any news about myself, as I was only with 1916 a short time and so few knew me, that is, as it says in 'Uncle Remus,' my influence was powerful lacking. However, I think a lot of my connection with '16 and want to do all I can to stay by it. I have gone into the sandpaper business with two other fellows and have our plant up at Westfield. If anybody wants to work, just go in for yourself and you will get it and plenty of it, too, but it is worth it. Any '16-ers up this way, I would be glad to see."

Leonard E. Best has resigned his position as assistant laboratory manager at the Hood Rubber Co. of Watertown, Mass., to go with the Richard Best Pencil Company, Irvington, New Jersey. His new address will be 299 Clinton Ave., Newark, N. J.

From the Rocky Mountain District we have the following from Murray Graff: "The 1916 directory was received about a month ago and I certainly am glad to get one. It was very interesting to me and I am sure it was to the other boys also. Tech men of our time seem to be as plentiful as hen's teeth out this way. Would surely like to attend the reunion in 1925, but it is a long way from Denver to Boston and chances of my being able to attend look pretty small at the present time.

"I am in the selling end of the game for the Westinghouse Electric & Mfg. Co., and enjoy my work very much. In this part of the country our work is very general and we have to sell everything from electric irons to a complete power house. Of course, there are a few disadvantages, such as being expected to obtain a few hundred thousand dollars' worth of business from a state where you ride for hours through sage brush without seeing a tree or a house, stopping at hotels which are anything but modern, eating at the 'Greasy Spoons,' etc. However, all in all, it is not such a bad existence."

Rowlett has at last been found and has sent in a little dope, also his check for \$3.00. (How does that sound to you fellows that have disregarded the call for help?) "Your plea for news and cash arrived and I've just time to send you this check for three 'Berries.' I don't even know what the class dues are, as I seem to have been crossed off the list of members. If this check is insufficient, let me know, that is, don't count on my buying a new 'Dorm' or creating a chair in anything, but count on me to hold up my end. As for news, I have none of importance, but will take time a little later on to compose you a masterpiece. As yet, I'm not president of anything nor do I drive a Rolls-Royce. In fact, I'm kept busy keeping a step ahead of collectors, so you see a personal account of what I'm doing wouldn't be very inspiring reading for Institute undergrads."

Another Westinghouse Electric man, H. A. Hands, at Springfield, Mass., writes: "There is nothing I can say that will be of particular interest. I have not met a '16-er here for over a year. I am glad to learn from The Review that Wellington hangs his hat in Springfield once in a while, and I'll endeavor to catch him at home sometime.

"The class directory is really a fine piece of work and a mighty handy thing to have around. I really believe that if the names could be grouped by states and cities, as well as alphabetically, it would make it additionally useful. I'm enclosing my check for \$2.00 for dues for this year. Here's hoping you get many others and that the officers can now do something to wake us up to our mutual obligation toward our class and school."

Samuel Lapham of the firm of Simons and Lapham at Charleston, S. C., has a few words of information: "Have been practicing architecture four years as junior member of the above-mentioned firm. After discharge from our noble army in 1919, having been 2nd Lieutenant in the 61st Artillery, C. A. C., 1st Army Artillery A. E. F., with important sounding duties of Orientation Officer of Battery A and Camouflage Officer of the 1st Battalion thereof, I worked in various offices until this firm was formed in 1920. We have been at it ever since, running a general practice and taking any job that wants or can be convinced that it needs an architect. I indulge in historical architecture writing on early southern colonial architecture as a side line and have had several subjects on phases of this subject in the *Architectural Forum and Records* during the past year. The latter magazine is also to publish some of our work in its March, 1924, issue.

"South Carolina Tech men are few and I know of no others of '16 around here at present. W. W. Dodge is at Asheville

## STANDARD PLATE GLASS CORPORATION

*Dependable Service*

BOSTON  
HARTFORD  
CAMBRIDGE

# Have You Begun to Save?

IT IS NOT what you earn—but what you save that counts. "Endowments In Series" is one of the best plans yet devised for systematic saving, and in case of death your beneficiary will receive far more than you have put into it. An example of this latest form of protection is shown herewith:

Amount	Issued at Age 32										Premium
\$3000	Endowment	payable	at	death	or	at	age	60			\$104.25
3000	"	"	"	"	"	"	"	62			97.53
3000	"	"	"	"	"	"	"	65			89.55
3000	"	"	"	"	"	"	"	67			85.38
3000	"	"	"	"	"	"	"	70			80.46
\$15000											Gross Yearly Premium \$457.17

Annual dividends either decrease the yearly premiums, increase the amount of insurance or reduce the number of premiums to be paid.

These policies aggregating \$15,000 will be paid at death, or \$3000 at maturity of each policy as an endowment at the respective ages mentioned above.

*Let us tell you all about it*

*Over Sixty Years in Business*

*Now insuring over One Billion  
Eight Hundred and Fifty Mil-  
lion Dollars in policies on  
approximately 3,300,000 lives*

*John Hancock*  
MUTUAL  
**LIFE INSURANCE COMPANY**  
OF BOSTON, MASSACHUSETTS

## 1916 Continued

N. C. Of South Carolina men of other years, J. W. Barnwell, '15, is Assistant Bridge Engineer of the State Highway Commission and I attended his wedding to Miss Margaret Bauer in Columbia, S. C., last September. T. D. Lebbly, '17, is in Knoxville, Tenn., with a construction company. I have not been in Boston since 1917, but hope to get there for the Ten-year Reunion."

Hal Grey now located at Leominster has a little to say about himself: "This being my first effusion since 1916, I feel that I owe you and a good many others some sincere apologies for remaining buried for so long and not doing my share towards helping out in the good cause of holding the crowd together as well as doing my share of news gathering. I guess part of my coming to life was due to a chance remark of one of my old '17 friends whom I saw recently for the first time in a good many years, when he told me that '16 was the dearest class in the whole organization. There isn't a lot I can tell you about myself for Flip Fleming has acted as class correspondent in Akron, Ohio, and has done a pretty fair job, at least much better than the rest of us that were out there.

"I have been with the Goodyear organization ever since leaving school, but have just broken away and am working in Leominster for the time being, at least, although I do not know how permanent it will be. Leominster seems to be as full of celluloid works as Akron was of rubber factories. However, it seems mighty good to get back in this part of the country and I've about made up my mind that it is hard work to permanently transplant a New Englander. Most of them that I know out in Akron are all hoping some day to come back.

"My history in brief is one year of experimental work, three years in Europe and three years and a half in Akron for Goodyear in factory liaison work. It is quite a change to get into a small organization after that experience, but I am enjoying it very much. I am being giving a pretty free hand here along the lines of factory systematizing, costs, etc., to see what I can do with them in an effort to bolster up some of the weak spots.

"So far, I haven't run across a single sixteen-year, but I suppose they are around somewhere and I'll find them soon. Am planning on being a little more sociable in the future, so if there are any doings, be sure to let me know and I'll try to be there, and tell you more things."

Captain Joseph W. Barker, who has been here, there, and everywhere, is now located at Fortress Monroe and sends us

the following: "Here is an answer to your SOS call, but I am sorry to say that there is mighty little news to be had from me. I am in an out-of-the-way place here, where I have little chance to see any '16 men. I did, however, run into Harold Dodge some time ago. He is working for the Westinghouse Electric Co. on experimental engineering and was down here in connection with some sound ranging work. We had a nice little chin-chin, but he had to run off back to New York, for which I couldn't blame him.

"I'm here going to school again for nine months and the agony will be over in June. It surely is agony to get back to concentrated study, but the course is extremely interesting in spite of that. I expect to be around Boston this summer, as I shall probably be ordered to Wakefield to shoot on the Coast Artillery Rifle team."

From the far southwest, Ken Sully has been heard from: "I spent Christmas and New Year in Winchester, Mass., and went down to New York on January 3. While in Boston, I visited the 'Stute several times and had lunch in the Walker Memorial. In fact, I saw several of the men from '14, '15, and '17, but never was fortunate enough to get in touch with any of 1916 until I arrived in New York, which seems to be a Mecca for Tech men. Of the '16 men here, I saw Repetti several times and visited with him at his office at 247 Park Avenue, where he is located with the Dorr Co. Had lunch with Rep and Jimmy Evans of Prom Committee fame. I also saw considerable of Leonard Besley. Thanks very much for forwarding a copy of the directory which I have read and enjoyed immensely. I hope to be there in 1925 for the reunion and here's wishing that it will be a big success.

"I am still single and working for the Gallup American Coal Co., where I am chief engineer. Please note that my address has been changed to Gamercro, New Mexico. This is the new town we have built and the location of our new coal mine where we expect to produce 4000 tons of coal per day.

"George Ira Crowell is now located at Brockton, Mass., in business with his father as general contractors. From all reports they are doing very well as Gira has decided it is better to work than do so much riding."

L. E. Knowlton, now located with the Providence Gas Co., writes: "My address is now 50 Farragut Avenue. By a coincidence I moved into the house at this address just as another '16-er was moving out, W. H. Blank. As stated in the bulletin



1916 Continued

I am assistant to the engineer of manufacture of the Providence Gas Co. My boss is a Tech man, by the way, R. L. Fletcher of the Class of 1915. We have two other Tech men associated with us.

"We have a very live Technology Club in Rhode Island, which includes several 1916 men among its active members. I notice that the name of Chan Kinthong appears on the roster in the bulletin. Mr. Kinthong died three or four years ago. He was a native of Siam and came to this country at the behest of an American missionary with whom he lived for a time. He spent three years at Harvard College and two years at M. I. T. He had intended to return to Siam and assist in the development of that country through his knowledge of modern engineering practice. He was possessed of a thirst for knowledge and a pleasing personality which made him popular with the students in the two institutions in this country which he attended."

Thomas G. Jewett, Jr., of New Bedford, writes: "In answer to your card of February 7, I lead a very quiet life at this time of the year, and as a result have very little to write about. If I could write such letters of interest as I have read in *The Technology Review*, I would be mighty proud. All I do is build roads for Massachusetts State, City of New Bedford and surrounding towns, also the American Woolen Co. at Shawsheen Village, Andover, and towns surrounding Andover, including Andover."

"Am busy helping to put on a real alumni dinner here in New Bedford, so get up to Tech once in a while. You heard all about the dinner in New Bedford for Tech alumni in the April Review."

Henry Shepard sent us a copy of *The Main Sheet*, a small paper issued by the Narragansett Bay Fleet of the Star Class Yacht Racing Association. Sol Makepeace is Secretary of this association and is doing a good job as editor. If we get stuck here in Boston, we will know where to turn for help in the future. Thanks, Henry, for the information.

To the Class of 1916 is the address on the envelope received from Arvin Page. "Mrs. John James O'Connor announces the marriage of her daughter, Claire Eleanor, to Mr. Arvin Page, on Saturday the 26th of January, 1924, in the city of New York. Miss O'Connor was graduated from Smith College in 1917 and

specialized in applied sociology with reference to women in industry. Arvin Page is now located in installing machinery in cotton mills in the South, at Winston Salem, N. C."

Lastly, we have a long letter from Donald O. Dunn from Cleveland, Ohio: "I received the 1916 directory and want to congratulate you on getting out such a complete document. In my own case, however, you omitted some rather important dates which I submitted to your predecessor in office, but never succeeded in getting to the boys. This is that I have been married since June 27, 1917. My wife was Helen Irwin Justis of Cincinnati and a Smith College graduate of 1918. We have a daughter, Elizabeth, born on December 2, 1921, so don't enter me as a bachelor on the records any longer."

"For the past five years I have been a Job Captain in this organization (Weeks & Weeks, Architects) and during that time have been fortunate enough to be associated with the execution of several rather large commissions."

"Coleman and Kittredge are about the only 1916 men I have seen in recent years around here. Most of the Tech men in these parts seem to be a good deal older or are some of the new crop from Cambridge. Am sorry that you have decided to set the Tenth Reunion for 1925 instead of 1926. Fully intended to be there in 1926, but am not so sure I can make it next year. Will try, of course."

"It does seem as though a lot of fellows are slow about writing. I don't know why so many seem to feel that they have to be a President of a million-dollar corporation before they dare report any progress."

"What's the matter with the gang — particularly the architects? I'd like to hear from Bob Allen and Mark Lemmon not to mention Este Fisher, Sam Lapham, George Spooner and John Hogan. Well, good luck to you all and wish you the best of success with the 1925 racket."

Joel J. Connolly, stationed at St. Louis, Mo., in the public health service, has sent in the following information: "I have delayed sending in my address for the class directory, but here it is: Treasury Department, U. S. Public Health Service, St. Louis, and I trust that a directory is still available to send. Such a directory is sure to be a great boon to those who have an opportunity to move around and look up classmates."

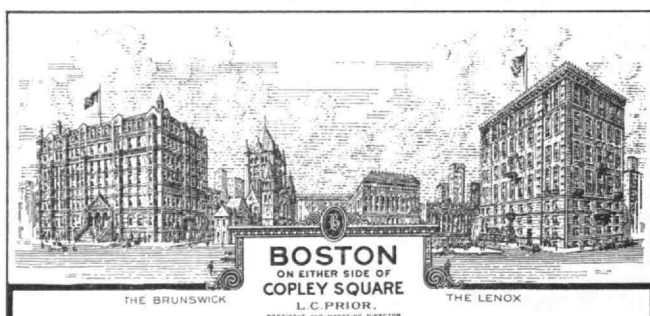
"A baby girl, Elizabeth Louise, was born on September 6, 1923, constituting our first attempt at raising a family. The only '16 man I've seen lately is Young, whom I met in St. Louis. These are busy days for me, so I can't write much, but what I could write isn't particularly interesting, so it's just as well."

Eddie Clarkson, our roaming Sanitary Engineer, has finally written us from San Diego, California. "I notice on looking over the copies of *The Technology Review* that there is not much material from 1916. (Secretary's Note:—Wonder how he gets that way?) I also note that I am listed as Assistant Secretary, 1916. I am not sure in my own mind that I am still Assistant Secretary, but assuming I am, I am forwarding you the following material."

"I recently had a letter from the President of the Technology Club of California regarding a meeting and banquet to be held on February 8 at the University Club in Los Angeles. I was unable to attend this banquet as I had to make a long trip on a power plant development project at the time. However, I wrote the President of the Technology Club to ascertain what had been done and see if there was any material which would be interesting to our class. I have not heard, as yet, but will forward you any information."

"Will you please see that my address is changed from 1104 Central Bldg., Los Angeles, to 920 8th Street, San Diego. I am no longer with J. B. Lippincott, having moved to San Diego the middle of last month and am associated with Mr. T. H. King, a consulting civil engineer of that city. You may be interested to know that I am to be married the last of March to Miss Marjorie McCartney of La Jolla, Calif. I expect to live in San Diego. I had a little correspondence with K. M. Sully, M. I. T., 1916, recently. He is chief engineer of a coal mine located at Gallup, New Mexico, and seems to be well satisfied. There are comparatively few Tech men out here with whom I have come in contact. For the past two years I have been on the Santa Fe Ranch, Del Mar, Calif., where there was one Tech man besides myself, John H. Chase, '18. There are quite a few M. I. T. men located in and around Los Angeles, and if you will send me a list of the men you know about in this locality, I would be much obliged to you."

John J. Hickey, our noble sanitary butcher, writes: "Enclosed find my check for annual dues. I intended to mail it long before this, but overlooked it in the excitement of the past month. My sister was badly injured in your town (Arlington) on the 5th of February, when a taxi in which she was riding collided with a street car. We feel quite sure she will recover, but will be terribly disfigured."



## The Most Beautiful Spot in America

forms the setting for the Lenox and Brunswick hotels. Located at Copley Square, bordering Boston's exclusive residential district, yet within a short walk of the theatres and better shops.

The hub of motor routes radiating to those points of historical interest for which Boston is famed.

Come to the Lenox or Brunswick where the comfort, service and restful atmosphere remind you of a carefully managed home — where the well-being of a guest is always the first consideration

*The BRUNSWICK*

Boylston St. at Clarendon

*The LENOX*

Boylston St. at Exeter

L. C. PRIOR, President and Managing Director

# Financing Your Foreign Trade



Main Office, Court Street

**O**UR Foreign Department offers every modern banking facility for financing international trade.

It is always glad to furnish information on trade conditions, and the credit of foreign names, and to quote, upon request, rates of exchange on all countries.

## Old Colony Trust Company

Boston, Massachusetts

1916 Continued

"As you probably know, I am in the wholesale meat business with my father. I feel quite acclimated by this time and really think I did the right thing by choosing to enter an established business rather than follow up engineering. As a side line, I was interested for a short time with P. C. Webber in the roofing business. We both sold out our interests last month. Please return the good wishes to John Woods and tell him to look me up whenever he is in town."

Dr. Murray P. Horwood, Assistant Professor of Biology and Public Health, at M. I. T., has obtained a leave of absence for three months from the Institute to assist the Research Division of the American Child Health Association in its survey of eighty-six cities now under way. Dr. Horwood will assume his new duties early in March and has been assigned to cities in the New England States selected for the survey. In making this survey of eighty-six cities between 40,000 and 70,000 population, the American Child Health Association expects to obtain an authentic status of child health in the United States. Dr. Horwood has made several public surveys for private organizations in Taunton and Quincy, Mass.; Glen Ridge, N. J.; Oklahoma City, Bartlesville, and Ardmore, Okla., and in Lafayette and Tippecanoe, Ind. He also directed the tuberculosis survey in Philadelphia.

Dr. Wilson spoke at Rochester, N. Y., to the American Chemical Society at its meeting on February 4 in the Eastman Bldg., University of Rochester, on 'The Mechanism of the Corrosion of Iron and Steel.' Dr. Wilson was formerly Director of the Research Laboratory of Applied Chemistry at M. I. T. He has also been connected with the General Electric Co., and the U. S. Bureau of Mines, as well as serving as Major in the Chemical Warfare Service in the Army during the War.

Theron S. Curtis writes from Attleboro: "I am in receipt of your letter of February 7. Out here in the jewelry manufacturing district, Tech men seem to be very scarce. At any rate, I have not come in contact with any 1916 men and there is therefore no real news of interest that I can give you. I had a telephone call from G. I. Crowell of Brockton, along the first of the year and in comparing notes found his case to be similar to mine in one respect, anyway; that is, that our hair is getting lighter, whereas our bodies are getting heavier.

"As for my own case, would say that I am still trying to make and sell jewelry for men and am managing the T. I. Smith Co.

Along this line I would like to suggest that all Tech men should wear white collars, as this makes necessary the use of at least two collar buttons and that helps my game. I congratulate you on the interest you are showing and wish you success."

Alvan Page and his bride have been spending a few days with his parents at Wollaston, Mass. Mr. and Mrs. Page will make their home in Winston-Salem, North Carolina, where Page is engaged in the manufacturing business.

Walter W. Binger of Thompson & Binger, New York, writes: "I am indeed impressed by the amount of work that must have been put into getting out the 1916 directory and am very happy to have one. I am going to make a real effort to check up on some of the men whose present whereabouts are in doubt, and expect to write to some of those whose addresses I think are correct but who have not replied, so that the next edition may be even more complete. I think such a record, if kept up-to-date, is exceedingly valuable, and I for one send you my sincere thanks for what must have been a real job.

"By the way, I had a post-card from Bill Farthing from 550 Sixth Street, San Bernardino, Calif., which was the first crack I had had of him in a long while."

R. E. Gruber, who has returned from a trip around the world, writes: "Your personal letter of December 1 reached me only a short time ago; that I received the letter at all is to the credit of the International Postal System, as well as Thomas Cook & Son. Various stamps and remarks on the envelope indicate that it was sent to me at Rahway, arrived in Singapore the day I left for China, and just missed me in Honolulu. From these remarks you may glean that I have spent some time in foreign lands. As a matter of fact, I left New York last June, went to Europe, and decided to come back 'the other way 'round.' This brought me to Egypt, Palestine, India, Java, China and Japan, with Hawaii and the Volcano Kilauea as the 'pièce de résistance.' I was in Peking on December 14, the date on which the American University Club of Peking held its annual dinner at the Grand Hotel des Wagons-Lits. About sixteen colleges were represented. At the M. I. T. table were about twelve, mostly Chinese M. I. T. grads. It was very strange to hear a good 'We are happy —' so unexpectedly in this remote corner of the world.

"At the Tech Dinner held in New York on March 7, there were twelve 1916 men present." (That's more than we can

1916 Continued

get out right here in Boston, where there are about seventy 1916 men located.)

Another announcement for you '16-ers. "Mr. and Mrs. Christopher Steadman announce the marriage of their daughter, Katharine, to Mr. Harold Chipman Fuller, on Saturday, the first of March, 1924, New York City. Fuller is a graduate of the Chemical Course, after which he was chemist for two years at the paper mill in Berlin, N. H., at the end of which time he entered the service in the aviation branch of the Army, where he served until the end of the War. He had held the commission of a lieutenant. At present, he is in business in Des Moines, Iowa, in which city he and his bride will make their home. Mr. and Mrs. Fuller were married in New York at the Little Church around the Corner.

George W. Tuttle is located at duPont's plant at Buffalo. He writes: "I am still Power Supervisor of the duPont Fibersilk and the duPont Cellophane Co. They are both growing so fast it keeps me awake nights to catch up."

Stewart Keith, now located at Bird & Sons, Inc., Walpole, Mass., writes: "My record since leaving Tech has been uninteresting. I have tried my luck at several things with fair success or worse. Now I am spending my time accounting with Bird & Sons, Inc., at East Walpole. I have a nice little family, consisting of one girl, two boys and a Wellesley wife. There are several Tech boys here, but none from 1916.

Charles M. Hudson is with the Erie Railroad in the Valuation Department. His residence is at White Plains, N. Y. While he does not write anything pertaining to his work, he is glad to see the class showing up as well as it has during the past year.

Bill Barrett, who was recently married, went to Cuba and while there met an old 1916 man, Saladrigas. Barrett writes: "Enclosed is a note which Saladrigas (I believe you'll recall Saly, the Cuban singer) gave me on the occasion of my visit to Havana. Perhaps it would be of interest to some '16-er. Saly is a prominent figure in the architectural field in Havana. I visited several of his projects and they are representative structures in the Cuban community. I was in Havana for some time and enjoyed the visit with him very much. Here's his note: 'Gustavo A. Saladrigas was married on September 4, 1923, to Miss Anne Casanasy Castro at Havana, Cuba. Residence address: San Carlos 11 Vibara, Havana, Cuba. He was a student in the Class of 1916 at Tech for two years. He is a graduate of Architecture at the University of Havana, Class

of 1918, and has been working at architecture since 1919. He now has eight works going in Havana City, making a specialty on concrete work and steel structures.'"

As the big convention comes at Detroit, it seems good to get an invitation which your Secretary is thinking seriously of accepting. The Secretary of the Tech Club in Detroit (he is a 1916 man, P. C. Baker) has written as follows: "There are several men in town. Tredick Hine is doing great things in architectural work and after working on various large churches and redesigning a big department store here, he is now getting ready to help finish up Mr. John Dodge's \$6,000,000 mansion out at Grosse Point. Chuck Loomis comes in and out of town occasionally. H. B. Ullian with another Tech man is doing professional civil engineering work with offices in the National Bank Building. Herb Gfroerer is now in our midst connected with the Cadillac and we certainly ought to expect greater things of the V-64 as a result. We can use Herb in helping to show any visiting '16 men who attend the coming reunion in May, our Detroit. R. K. Floyd is in Detroit, but keeps himself pretty silent. Howard Foster was out the other evening to a dinner of the local association which we held at the University Club. Personally, I am busy doing law work and some real estate on the side. Some slip from the grace of Course II work. But the important news is that I am Secretary of the Detroit Technology Club. I am particularly anxious to bring to your attention and all '16 men the fact that Detroit is going to put on a reunion, May 19, 20 and 21, that will be well worth any of the boys' time to attend. If anyone has never seen Detroit and wishes to see the inside of the Ford, Packard or the other scores of auto factories, the town, the river, the golf clubs, the neighborhood and Canadian distilleries, and many of the world's greatest engineering feats, besides having the greater fun of having one fine time with several other hundred Tech men of the Middle West, this occasion in May is ideal. We want to get Flip Flemming up here from Akron and show him the 'world's largest tire factory.' Therefore, if any of you '16-ers can, it will be well worth your time to go to Detroit in May. I expect to go out by car and stop at some of the cities along the way and find out what's the matter with some of you '16-ers, so watch out, I may get you yet.

1917

RAYMOND S. STEVENS, *Secretary*, 30 Charles River Road, Cambridge, Mass.

When an irresistible force meets an immovable body they become an editor. Before last month's brief sentence was set up there were notes received both from the Secretary and the Secretary Emeritus. The second lot came in because the first was late — and The Review's Young Man needed but the slight excuse of tardiness to omit both and substitute the stereotyped fatal phrase, "No notes received from the Secretary."

We shall not this month add to the overset from last month — rather we shall delete certain pertinent statements of the Emeritus concerning the Secretary.

As we would have said last month:

You will note that Ray Ramsey asks about our Tenth Reunion and his query comes at an opportune time. An All-Tech Reunion is being planned for next year, or thereabouts, and others will come at regular intervals. Most of us want to take in our Tenth Reunion — and many of us the All-Tech Reunions. Suggestions are in order.

Ramsey has other things to say, "In January, 1919, I resigned from the Army (Artillery) as a Major and returned to my position in the power sales bureau of the New York & Queens Electric Lighting and Power Co., New York City. Last March I accepted a position as power engineer of the Associated Gas & Electric Company with the general office at Ithaca. We operate in five states, our largest territory being central New York State. Although my title is power engineer, I handle all new business, excepting merchandising. The work is extremely interesting and the organization is fine. We are managed by the J. J. White Management Corp.

"We live in Ithaca (The Home of Cornell University) which is a delightful little city noted for its scenic beauty. I say 'we'; in May, 1920, I married Miss Betty Baker of Jamaica Plain, Mass. You can put me on record as recommending married life most heartily, if you think it will help any doubting bachelor.

"While in New York City, I frequently met classmates, but since locating in Ithaca, I have not had this pleasure. Perhaps Cornell drives them away.

"By the way, I am planning to attend our Tenth Reunion. Is it too soon to start agitation on this subject in The Review? — Best regards to you and any other classmates at the 'Stute."

It is high time the Boston and New York gangs were temporarily tuned out. We have word from several other points, among them Springfield. Dick Rowlett there takes advantage



## Robert A. Boit & Company

*Insurance*  
OF ALL KINDS

40 Kilby Street

Boston, Mass.





# ESTABROOK & CO.

---

## SOUND INVESTMENT SECURITIES

---

15 State Street  
Boston

24 Broad Street  
New York

HARTFORD

SPRINGFIELD

PROVIDENCE

NEW BEDFORD

1917 Continued

of all that 1917 has to offer, but is still holding his 1916 stock, vainly hoping for a dividend. He made a generous offer of future coöperation in obtaining news for this column, and his offer was promptly accepted. He writes: "I see Jim Millis frequently and as for Joe Battis Woodruff — well he and his better-half and I and mine wage violent battles at Bridge (which I crave) and Mah Jongg (which is a heluva game if you ask me) about every week, so you see all is not lost. As for The Review, I've been getting it regularly for several years and paying my dues apparently. If my name is not on the list you saw, it must be on their collection list 'cause the bills reach me O.K."

"The only 1917 man I see a lot of is above-mentioned J. T. B. Woodruff. He is still champion city planner of Springfield. My work as New England and Canadian representative of this company (Cameron Machine Company) takes me all over the territory wherever there are paper mills or other industries which use this class of machinery. In my travels I see many Tech men."

"When I'm in Boston in a week or so I'll look you up. I still live at 147 Sumner Avenue."

William L. Dennen is too modest. He writes from The Hudson Coal Co., Scranton, Pa.: "I'd be more than glad to write you several pages of news about myself if there were anything interesting to write about. I'm down here as a Special Engineer to the General Forecast Committee. My work is to forecast the production which may be expected from the collieries for the next twenty years and the expenditures necessary to obtain the same. I have been here a year now and I haven't seen a Tech man since I came. Apparently, they do not go in for coal mining very much. Before I came here, I was in Mexico and Guatemala and if Congress will be sensible and pass a reasonable tax bill so as to encourage mine examination and development, I hope to get down that way again."

"With best regards to the class."

Mack Angas is in touch with at least one phase of the boiling hot political situation: "Ponzi is no more, but with the Alumni Association on the job, Boston need not mourn his loss. I got the Association's delightfully naive little note about the change of the beginning of their fiscal year. My check has gone forward in the same mail as this letter. I certainly wish I could convince Uncle Sam that I had changed the beginning of my fiscal year every now and then when I get particularly short."

"I came out here (U. S. Naval Station, Hawaii, Pearl Harbor, T. H.) in early 1922, after four years at the Philadelphia Yard. I am still in the Corps of Civil Engineers of the Navy and expect to stay in it if the Line doesn't get away with one of its bi-annual attempts to abolish the Staff Corps. There isn't a great deal of news to report since I last saw Debell in Philadelphia. When I first came out here my boss was a M. I. T. man, Commander C. D. Thurber, of the Civil Engineer Corps, and the present Public Works Officer, Commander E. H. Brownell, also hails from M. I. T. Patch, whom some of you remember as a Naval Academy man taking the regular naval constructor's course and graduating in 1916, is out here as Construction Officer. A crowd of Army engineers from Schofield Barracks — the big Army Post in Hawaii — were down the other day looking over our fuel oil storage job which is at present furnishing Presidential aspirants so much ammunition. A vaguely familiar looking First Lieutenant asked me if I were the Angas of the Class of 1917 of M. I. T. He was Groves, who left us to go to West Point a year before graduation. They make him wear a hat and cut his hair in the Army, and I didn't know him. Have been hoping that Eddie Atkinson might be shipped out here, but he seems to have had the gift of being transferred from one fort to another in the immediate vicinity of New York."

"My last bit of news is that Mrs. Angas and I now have three youngsters, all girls — well, Cleofan will probably be needing some members in eighteen or twenty years anyhow."

"Remember me to any of the crowd that happen to be around when this arrives."

P. N. Rowe writes from India as follows: "Although I belong to one of the so-called countries seldom heard from, I cannot help but express thanks to those who give us the news in the '17 column of The Review."

"If anyone should come around wanting to pay any money to me, tell them they are still safe. I am putting in my sixth year in Calcutta, chiefly active in buying shellac for the Rogers-Pyatt Shellac Co., of New York. When we get a short crop it is as hard to buy a few tons, as it used to be to grub a 'Fatima' in the Union after the Christmas holidays."

"I had a card from Walt Pond the other day. First I had heard from him since 1917, and it impressed me the way his voice did the night he yelled out after we had upset in Professor Russell's canoe into Gardner Lake."

1917 Continued

A recent acquisition to The Review file of light literature for idle hours furnishes interesting information concerning the Dun and Bradstreet's rating of a member of the class. The man who has achieved the D. and B. rating had it administered by *The American Legion Weekly*, issue of February 22, 1924, Vol. VI, No. 8, page 23, col. 1. His name is the ninth on the list of thirty odd gentlemen who it says are the arch criminals representing the monied interests of the country which are alleged to be subsidizing the Anti-bonus Campaign. The article is captioned, "Again the Mellon Touch." The list is headed by Judge Gary of the Steel Corporation and includes the Presidents or Vice-Presidents of such companies as Colgate and Company, The Texas Company, General Motors Corporation and the New York Central Railroad. It includes four men whom it calls "capitalists": Cleveland Dodge, H. S. Vanderbilt, Stuyvesant Fish, Julius Fleischman and Ralph Pulitzer of *The World*. The ninth name on the list is "E. P. Brooks, American Cotton Oil Company." It is only fair to state that Penn left that Company last summer and is now mixed in the tar and oil business with the Barrett Company. When seen in New York recently before the date of the publication of the article he did not mention that he expected it would come out.

The Emeritus had the pleasure at that time of spending a pleasant evening with Mr. and Mrs. Brooks at their residence in Upper Montclair, N. J., at which there was also present Mr. and Mrs. Paul C. Leonard, who live in South Orange. Paul is with the National Cash Register Company in Newark. The evening was devoted chiefly to a discussion of the relative merits of the Brooks and Leonard babies, during which the Emeritus smoked many cigars.

Belated news has just arrived from a New York correspondent that he attended the Technology Club dinner on March 7 at the Waldorf and heard the Bell ringing at the 1917 table. On the radio it sounded like a Dud to us.



## BARTON & ELLIS COMPANY

### INSURANCE

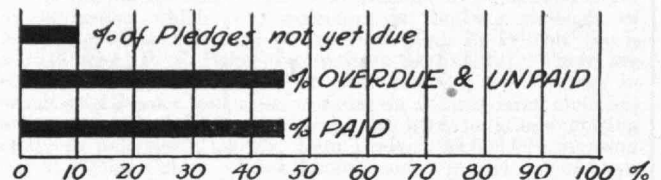
We are particularly qualified to serve manufacturing and mercantile establishments and have many of New England's prominent corporations of this class as satisfied customers.

19 PEARL STREET  
BOSTON, MASS.



1918

P. W. CARR, Secretary, 400 Charles River Road,  
Cambridge, Mass.



Alumni Endowment Fund Statistics Applying to the Class of 1918

Do your stuff, 1918 men. The above picture represents graphically the status of the Alumni Endowment Fund pledges as made and, in some cases, not paid by the gang, our gang. The figures at hand show that of the fifty-six classes graduated from the 'Stute, only four, all younger, have records of overdue pledges as bad or worse than ours. The only occasion since graduation that has developed a request from our crowd for money was the drive for the Endowment Fund. In the recent past, other things have been suggested, in which the class might logically help, but informal discussion with some of the gang around Boston has resulted in turning these things down without more ado, the reason being the desire to see the Endowment Fund Pledges cleaned up before tackling anything else. Will you, holders of unpaid pledges, please help us in our efforts to improve the class standing in the alumni fund records? Paying even a part is better than no action at all. The progress of payments will be noted at the head of this column each month, and indicated graphically.

As these notes are going to the Editor, plans are afoot for the third class luncheon, the monthly affair which started in February and has been so successful to date. By the time these notes appear in print, the time will have arrived when we will have had to decide whether we want to have a reunion this spring or not. There has been considerable agitation for the yearly reunion as opposed to the five-year affair. What is the sentiment of the gang? Let me have a note from each one of you outlining your ideas. Each note will be answered and the result recorded, so that if there is enough feeling, we will take action on the matter. I had a corking good time at the Cliff House last year. Let's have another one of some kind.

Do not forget the monthly luncheon, first Monday in each month at the Engineers' Club in Boston, at 12:15 at the corner of Arlington Street and Commonwealth Avenue. The last luncheon crowded the private dining-room with eighteen men. Let's go for thirty men at the next one. It will be the last before fall.

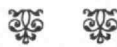
Saw Perry Hewitt at the Tech Club in New York a short while ago. He still remembers the last reunion and has not forgotten the vandalism practiced by some teetotaler who got away with his suitcase and contents, safely hiding the same until the reunion was over. It was a dirty trick. Fortunately, our toast-master found the case before dinner (the suit case) so that he could appear in good form. Perry has deserted the class since the affair happened and now swears allegiance to the 1917 crowd whom he thinks are much more sympathetic toward him and his ideas. I personally can vouch for it that he has a bunch of friends in our crowd yet.

Hamilton was at the Tech Club with Hewitt. He is living the life of Riley, arises at 11:00, works from 11:30 'till 11:45, lunches 'till 3:00, works again 'till 3:45, then goes home to get ready for a hard evening. It's a great life.

Phil Craighead covered the Tech Club of New York Dinner for our class. A paper was circulated at the 1918 table which brought forth the following signatures and remarks: Phil Craighead, Bridge Engineer with the Shoemaker Bridge Co., 256 Broadway, New York City.—Ev Rowe, Management Engineering, with the Metropolitan Life Insurance Co. Married and happy.—Monk Pierce, Assistant to the President, McCall Publishing Co.—Phil Dinkins, Sales Manager, Heavy Chemicals Division, The Kalbfleisch Corp.—Otto Lorenz, back from Spain, and dry.—A. B. Vought, with Ralph B. Carter Co., New York City.—Charles H. Tavener, Production Manager of Aschers Liberty Electrical Corp., Port Chester, N. Y. Married and living at Greenwich, Conn. Charles, Jr., is well and happy.

Albert Mayer, Secretary Taylor Construction Co., New York City. Just returned from Europe.—Sidney Judson, single, living at home.—A. R. Mumford, Fuel Engineer, New York, Steam Corp. Married, has two daughters and is living at Mount Vernon, N. Y.—Pete Harrall could not come as he broke his leg a few days ago while skating.—Al Haertlein is Structural Engineer with Dwight P. Robinson, lives in White Plains and has two boys.

FORMER students of the Institute who establish  
themselves in business in Boston or Cambridge  
are assured friendly interest and co-operation  
in their banking problems  
by a bank that knows  
Institute men.



*Manufacturers National Bank*  
KENDALL SQUARE, CAMBRIDGE

1918 Continued

That was certainly a good representation of the class, and the notes are an indication that some of the boys are making considerable progress in the business world.

W. S. McGuire crashed through with the following note a few days ago: "Wrote to Bill Ryan over six months ago, announcing the arrival of Priscilla Margaret in Weymouth, Mass., August 20, 1923, but am beginning to think that he forgot to put it in or else never got it.

"The young lady is coming along very well, has two teeth but not much hair. This item will, of course, not be of much use to you and the other survivors, but may be of interest to some of the other married men for purposes of comparison.

"Things are about the same down here, nothing much doing, but as we were in the vicinity of Boston this summer while I was attending Harvard Summer School, and again at Christmas, we manage to keep from getting very bad.

"The last time I was in Boston, I saw one of the oil kings, Pinkham, not yet mentioned in the Senate inquiry, and McLeod from Lowell, but I hardly ever see anyone in this part of Rhode Island.

"If any of the bunch come this way, I hope that they will look me up at the Rhode Island State College, Chemistry Department."

Bill Ryan finally came to light with his second letter in the same number of years. However, it was a good long one and very newsy, so we will have to overlook his procrastination: "The other day a little card was dropped on my desk announcing the arrival of Virginia Anna Kelley on March 5. I surely wish I had been there to have seen Tom's smile. Certainly, we all rejoice with them in their happiness.

"For years I have been trying to get a letter out of Jim Todd, but to date a Christmas card is the result. Last week I ran across a fellow from Jim's home town, and so can make a report on him. As long as Jim won't write, he can hardly blame me for seizing on any news that comes my way. Jim is the third member of the firm, Denton-Ross-Todd, owners of one of Lexington, Kentucky's, big department stores. Somehow, it is not where we would expect to find a former 175-pound wrestling champion, ex-ensign of the U. S. Navy, and all-star tackle of the 1918 Technique football team. It is also said that Sunny Jim is considerably above the 175-pound class now.

"Speaking of Jim naturally brings Packey McFarland to mind. From Harold Weber I learn that Packey has become

a radio fan. Either radio is a lot better than I give it credit for being, or else Packey is slowing up.

"Saw another radio fan at the dinner of the Tech Club at which we listened in on the New York banquet. That was Wilfred Holt. The last time I saw him we were swapping news of the gang when he said, 'Speaking of radio, I saw Harold Weber in Boston last summer.'—Harold seems to be the king of the radio fans.

"Had luncheon with Donn Burton a few weeks ago. He is in the insurance business as Vice-President of the Warren Service Corporation. Lest we be misled by the title, private office, etc. Bonn hastened to assure me that he had not salted away his first million yet. His account of the way he was pushed from chemical engineering into insurance was a good example of the closeness of the two fields in some respects.

"Thanks for the invitation to subscribe a thousand bucks to the University Club of Boston, Shorty, but I'll content myself with sending the one buck you ask for postage stamps. Your hard luck story of how many letters you have to write fell on unsympathetic ears. It will keep you in nights, hence out of mischief."

From the *Boston Globe* for February 8, 1924: "Newburyport, Mass., February 7, 1924. — Thomas M. Knowland and Miss Hazel Myra Weare, daughter of Mr. and Mrs. Samuel P. Weare, were married at the home of the bride, 2 Chapel Street, this evening, by Rev. Edwin H. Prescott, pastor of the Baptist Church. Miss Helen Varney was bridesmaid and Mr. Richard G. Knowland was best man. The bride was a graduate of the Newburyport High and Teachers' Training Schools and for several years taught at the Burley School at Ipswich. Mr. Knowland is the son of Mr. and Mrs. W. H. Knowland, and is a graduate of the Newburyport High School and the Massachusetts Institute of Technology. He was a lieutenant in the Chemical Warfare Service in the World War and is now a development engineer with the Hood Rubber Company at Watertown. Mr. and Mrs. Knowland will reside at 18 Ware Street, Cambridge."

The class will be interested to know that at the last luncheon, out of the eighteen men present, only five have so far survived the wiles of feminine charm. And why not, the married men ask? And then, again, why not?

Bill Ryan crashed through with the following, dated at the Lackawanna Plant of the Bethlehem Steel Co., Lackawanna, N. Y., on February 9, 1924: "Although I am the Course X Secretary,



1918 Continued

I must admit that you would never know it. (Truer word ne'er was spoken.) However, I have a few items lined up and will try to get back on the job, and send you what information I collect from time to time. I have been on the point of sending out a general appeal for news to the Course X men for some time and really hope to get it under way this week-end.

"Possibly, you have noticed that Cliff Bellis is on the staff of 'Chemistry and Metallurgy,' and I believe is handling their Metallurgical Department. Within the last few weeks he has had a number of articles and one book review. Cliff has had considerable experience in handling alloys and should find this work mighty interesting.

"At the dinner to Dr. Stratton at the University Club, here in Buffalo recently, I sat next to Wilfred Holt. He is with the Harris Soap Co. of Buffalo. Also at the dinner were Eddie Rossman, Course II, and Mike Flett, Course V. I see these boys quite often.

"Donn Burton is located here in Buffalo, selling insurance, but as yet I have not seen him. I hope the Tech crowd will get together shortly.

"Rip Porter, who is with the Carborundum Co. at Niagara Falls, spent an afternoon with me this week going through the steel plant. Rip's work, of course, takes him into refractories to quite an extent and he was interested on seeing their use in the steel industry.

"I hear from Packey McFarland occasionally, but otherwise have heard from very few of the bunch. This is very largely my fault, as I have been shifting about considerably for the last two years and doubtless letters sent me have either been returned or are now collecting dust at some of my past addresses.

"I will try to get things lined up again so that I can send you bits of news regularly. Remember me to any of the boys you may see."

The following information concerning one of the class was received through a letter from A. Nikitin to Professor Locke dated January 28, 1924 and written from 318 West 57th Street, New York, N. Y.:

"I am sorry to state that I received your first letter from December 26 only after the second one from January 24. The trouble was with the General Delivery at Y. M. C. A. As I feel that my first duty is to reply to you immediately. I visited Mrs. S. Antoufieff at her apartment, 120 Convent Avenue, New York City. She gave me the following information regard-

ing the date of Antoufieff's death is sixth, April, 1923. The death was a result of his long (over one year) heart and lung troubles, but not a consumption. After he left Technology he had been working for the Russian Education Committee with the translation of English technical literature into Russian. On account his poor health he was unable to work in a real technical line. He was absolutely conscious in his last hours and told that he is going to die in a few hours. Mrs. Antoufieff said to me that she sent full information to Alumni about Mr. Antoufieff's death and she was wondering that they did not inform you.

"I show to Mrs. Antoufieff yours first letter and she appreciated yours kind participation in her loss. If any other information that will interest you I will be very glad to do anything in my competency.

"P. S. Mr. Samoyloff married Russian girl. She is a doctor physician graduated in Russia and here in U. S. America."

Jack Hanley keeps up the good work, and has crashed through with a couple of interesting missives since the last copy went to press. His first was dated at home on February 3:

"Received your letter of January 21 when I returned to the office Saturday. (Observations which the Secretary's modesty does not allow him to repeat.)

"I certainly hope that the monthly luncheon idea will get a good start. It just occurred to me that I'm going to be in town this next Monday, and since I have not yet received my card, guess I'll get busy on the 'phone and find out if the luncheon date still holds. I'm enclosing a check for one dollar to boost the class funds credit a little. I am surprised to find that the treasury is depleted as I did not know that we had any funds. Where they came from is a mystery to me.

"I have paid my alumni dues, I'm happy to say, and it is my fond hope to join the University Club.

"Saw Aaron Goodman, Course VI, a couple of weeks ago at the Champion International Paper Company in Lawrence, as I was working in the yards in my overalls and jumper, having just come up out of a valve pit. He wanted to know if I were boss-piper or something similar. Upon receiving a negative reply, and with the information that I still had a job and not a position, he told me that he was looking over the territory in this part of the country for the Federal Electric Company with especial attention to the use of fuses. I am enclosing his card with address, 'phone number, etc.

"A few days later, I saw our old friend of Union Days, Johnnie Jansen. He is Assistant Superintendent of the Merrimac Paper Company at Lawrence, and says he is 'sittin' pretty.' He is married, though he didn't say settled down, and was anxious to hear from some of the old gang, especially Ed Brown and Ralph Mahoney. He is sporting a couple of cars, and apparently his time is his own, so I believe if you sent him a card about the luncheon, he could get away to attend.

"Saw Hall Nichols on the way to Worcester on December 31.

"Harold and Mrs. Collins called on us last Sunday on their way to Hingham and they are coming over tomorrow night to a little dance we're having here in town. That leads me to say that our latch-string is always out. Victory Avenue is off Adams Street which is the main road to Nantasket just before Beal Street, which latter leads to Wollaston. If I am not home, my better half will be pleased to see any of the Eighteeners and their families. She is much interested in class affairs, especially since she was officially welcomed into the class at the Cliff House last June.

"Well, enuf for now. Yours for a yearly reunion."

Aaron Goodman, according to the card received in the letter from Jack Hanley, is "Supervisor" with the Federal Electric Company at 136 Federal Street, Boston. His number is Main 0093.—Mail addressed to A. A. Saunders at Dorchester, and W. S. McGuire at East Weymouth has been returned. Does anyone know the present addresses of these two worthies?—Jack Parker is now with the Niagara, Lockport, and Ontario Power Co. in the Lafayette Building at Buffalo, N. Y.—Lloyd B. Van da Linda, according to the latest dope, is now with the New England Mutual Life Insurance Co., at 1020 Boatmen's Bank Building, St. Louis, Mo.—Yale Evelev has recently taken up his abode at 335 Walnut Street, Reading, Pa.—Alfred P. Grossman is now living in Boston, at 376 Abborway, Jamaica Plain.—A. C. Walker and J. A. Lee are both now located in New York, the former at 463 West Street, New York City, and the latter at the same address.

1920

KENNETH F. AKERS, Secretary, 54 Dwight St., Brookline, Mass.

It has been many a moon, as the saying goes, since we have really blossomed forth in print, and even now I don't know just how much "blossoming" we will have, but after three months of silence, I have accumulated what will furnish an ordinary month's news. Yes, that is sarcasm, at least, it is an attempt at it.

## Summer Session Massachusetts Institute of Technology

*Special Courses For Teachers*

*Undergraduate Work*

*Graduate Work*

*Laboratory and Research*

The regular high standards of work and instruction are maintained.

Teachers and students working toward degrees will receive full credit for records obtained in the Summer Session.

For information and catalog apply to the Director of the Summer Session, Mass. Institute of Technology, Cambridge, Mass.

## Behind Our Products—

stands the established reputation of the CARPENTER-MORTON COMPANY for delivering satisfactory merchandise.

For over eighty years our products have fulfilled our claims, giving full value for every cent. Our long experience enables us to supply a paint or varnish for every purpose.

We should be glad to send our representative to consult with you and help you at any time.

It will pay you to investigate.

## CARPENTER-MORTON COMPANY

77 Sudbury Street, Boston, Mass.

MANUFACTURERS OF

PAINTS :: VARNISHES OF ALL KINDS :: ENAMELS

INDUSTRIAL AND ARCHITECTURAL FINISHES

1920 Continued

I expect that I am half to blame by not putting out a circular letter and thus do a little gentle prodding. Put this down in the back of your heads, though, and that is, one year from this June we, the Class of 1920, have our Five-year Reunion. Start planning for it now, and any bright ideas any of you may have, send along. I'll keep them on file and use them when the time arrives for planning the festivities. So much by way of an introduction. Now, for some hard cold facts.

Harold Dennison has announced, or rather had it done for him, his engagement to Margaret Little of Wollaston, Mass. It wouldn't seem natural not to start off the news with the betrothals, so, as usual, they are heading the list.

Bat Thresher has gone Dennie one better. He was married on the twenty-seventh of November last, to Miss Irene Kattwinkle. Bat's wedding announcement was mislaid, which accounts for this tardy passing on of the glad tidings.

George Burt was married on December twentieth to Miss Mona Porter Draughton. They were married in Louisiana, in the city famed for its "Mardigras."

Ernest Huntress and Miss Zilpha Woodworth were married on December 24. They should have waited one more day so in after years they could give each other a wedding anniversary gift and a Christmas present all in one!

Vaughn Byron was married on January 3 to Helen Hall Ridenour. The marriage took place in Hagerstown, Maryland. This ends the engagements and marriages.

Phil Byrne writes from the Engineers' Club in Scranton, Pa., that he is madly chasing the elusive B. T. U.'s for the American Gas and Electric Co., which operates central stations from the Atlantic Coast to the Mississippi. Previous to this time he had been in South Bend, Indiana.

Take it all back—here's one more. Bobby Sumwalt has deserted us. He writes that he is engaged to Miss Caroline Causey. The wedding bells will ring sometime this spring.

Heinie Haskell is now in Pawtucket, R. I., associated with the Lorraine Mfg. Co. in the capacity of Production Engineer. He is in the textile game and his concern manufactures silk, cotton, and woolen goods, which sure is a complete textile job. Best of luck to you, Heinie, and my apologies for not writing to you. Look up Johnny Nash or Norry Abbott and they will show you the paths to the bright lights. You probably have seen them both by this time, meaning the men, and not two bright lights!

Here's what you call true spirit, and likewise excellent family coöperation. R. R. Ridgeway has so much on his mind that he can't write, but Mrs. Ridgeway came through in fine style, for which we are indebted to her for some good news from their household. First, she tells me that if I were married I would know that it takes nothing short of gunpowder to get a husband to accomplish anything at all. How's that! Keep it up, I'm betting on you, and as long as R. R. doesn't name me as a party to secret correspondence with his wife, you can write me all you want. We all like it! Ray is research engineer for the Norton Co., who manufacture abrasives. The Ridgeways have bought a bungalow and by this time according to the plans have quite a farm, as they were planning to specialize in White Wyandottes, Rhode Island Reds and possibly Plymouth Rocks! A young son, Stuart Longefellow Ridgeway, keeps the old home humming. They say he can do calculus problems even at the age of one and a half!

Creighton Stanwood writes from Millinocket, Maine, where he is still with the Great Northern Paper Co. Says he had a call from Carl Leander not so long ago. We'll say Carl had courage to hit up in the wilds of Millinocket!

Benjamin West writes from Birmingham, Alabama, where he is working for the Alabama Power Co., writing specifications. He also had an article in *The Tech Engineering News* on a "Super-power System."

Holy Smoke! Snug Etter of all men! His engagement is announced to Miss Judith Goodenow of St. Louis. I thought the old carefree Snug would be among the last to step out. However, we all wish him the best of everything in his new state! He and Homer Howes are still with the Bemis Bag in St. Louis.

Karl Bean is in Allston, Mass., and associated with the Acme Apparatus Co., trying to show how to make better radio sets. He came across with the following good bits of news: "Phil Nelles is back in Boston after spending two years with the Firestone Tire and Rubber Co. in Akron, Ohio.—Larry Burnham is still out there and going strong.—Ed Brickett is teaching at the University of Illinois and working for a Master's Degree.—Harold Hedberg is working for the Albany Felt Co. in Albany, N. Y.—Frank Badger is still with the Factory Mutuals and has just finished a trip to Canada and Chicago." Good letter, Karl!

Bink Carleton's mother very kindly wrote me a letter with

1920 Continued

news from some of our men. Bink is making colors for the Chipman Chemical Co., in Bound Brook, New Jersey. Bradford Clark was last heard of heading for Erie, Pa. Mrs. Carleton says Vic Cruse was in New York around Christmas time and hated to leave, as he met a very nice girl! Any good news yet, Vic? Mrs. Carleton said on the envelope that this all was between us, that is, if my French is not too rusty, but I feel sure she will forgive me for disclosing her name, as it is a shining example of what we might all do if we took a few moments off to write in a short note now and then. Am I forgiven, Mrs. Carleton?

To close these notes this time I am inserting in full three letters which I feel are very interesting and worthy of the interest of all of us. I will let them speak for themselves.

This one from Jack Logan, at the Y. M. C. A., Lewistown, Pa.:

"Jack Logan is in a small town sixty miles west of Harrisburg." Where do you get that stuff, 'small town'? I'd have you know that Lewistown has a population of 15,000 with a wide-awake Chamber of Commerce. It has been two years since the appendix 'Junction' has been removed from the sign at the railroad station. How many towns can boast of having four stations on one railroad as this town has? Why only yesterday the police force juggled a prominent druggist for bootlegging when the druggist refused to sell him some tonic. The Klu Klux Klan is raising a stink and a thousand men are out of work. Small town, hah!

"Did you read in the *New York Times* a few weeks ago about a train control device being applied to the New Haven Railroad with an editorial comment that it couldn't work? We have been operating a fifty-mile single track division under the same system of train control since the 11th of July. Although it is a single track road, no train orders are issued even for passenger train 'meets.' It is something like radio; the small currents in the rail induce voltage in a resonant circuit aboard the locomotive and then four radio tubes amplify this so as to operate a relay. It doesn't matter where the train is; any change in condition of the track ahead immediately affects the locomotive. We've got the radio tubes — why doesn't Harm Deal design a wired wireless for us to go with them — or perhaps Harm no longer 'pounds the key' or listens to the howl of the Magnavox? Having been sent here in May 'for a few weeks,' I don't know how much longer I shall have this place for residence; but working for the Pennsylvania Railroad allows me some privileges, such as a trip home to Philadelphia every week-end.

"I had a Christmas card from Archie Kinghorn with the engraving 'Mr. and Mrs.' on it! Had you heard anything about it? He refuses to answer my letters, so I guess I'll have to dig him out of his lair — he's in Philly.

"Don't write you didn't get any letters this time, as you did the last time I wrote you!"

(P. S. from Ken Akers.) That's coming back strong, Jack! Did I slip up on one of your previous letters? If I did, I apologize.

Another from Florence Fogler:

"Your heart-rending appeal for news in the November Review attracted my attention. I was trying to find time to give an account of my doings when, lo and behold, the December number blew in with something about me with no effort on my part! Being highly pleased, I will thereupon set down a few additional facts concerning my meteoric career, viz.:

"Being submerged for two years in the calculating section of the Turbine Engineering Department here at Schenectady nearly made me a candidate for the state insane asylum. But at least it was a nice, sheltered, comfortable place as I realize

now. In a moment of desperation I spread my wings and flew into the steam calculating section of the same department. Now that doesn't seem a particularly violent upheaval, but it landed me headfirst in a large round heap of entropy, B. T. U., Mollier diagrams, total heat, intrinsic energy, Marks and Davis, and all the little fleas that bite 'em! My job now is laying out turbine buckets and nozzles, making figures on steam extraction and working out heat balances for central stations. It is fascinating work though, of course, there are drawbacks. I have made figures on stations of all sizes all over the country, and get a pretty good idea of the new stuff that is being installed. I might even recognize an economizer if I met it on the street, and the relative merits of open and closed feed heaters are as an open book to me. And cycles — I am very well acquainted with Mr. Rankine, Sadi Carnot, Mr. Regenerative and Mr. Reheating!

"Apart from my job I am taking a course at Union College here, which is supposed to lead to an M.S. at the end of two years classroom work and upon presentation of a suitable thesis. Only Union is not coeducational, so I am in their catalogue as 'Not a candidate for a degree.' This is my second year at it, so that Green's theorem and Stokes theorem and Heaviside and Legendre roll most glibly off my tongue. Highly intellectual, what?

"It is a small world. I was home for three weeks this summer, and lo and behold one evening a very sporty Nash rolled up to my doorstep in Billings, Montana, and out stepped Mr. and Mrs. Roy Snyder, '21, XIV, and Fence Post, '21. The Mr. and Mrs. were on their honeymoon and had just come from Yellowstone Park, where they had met Pop Goodwin! As previously stated, it's a small world; moreover, sooner or later everybody comes to Schenectady.

"Course XIV doesn't seem to break into print very often. The last news I heard was about Section Boyden's daughter, who is a year and a half old, and about Ridg Ridgway's engagement. Can't you get a little action from the rest of the gang?

"With all my good job and interesting work, I am quite willing to close by singing 'I wish that I were back again.'"

The last is from Albion N. Doe written on the letterhead of Pressteel Engineering Corporation, Designers and Manufacturers of Pressed Metal Products, 392 Fifth Avenue, New York:

"I guess you have heard that I have deserted the occupation of teaching — not that I have yet had adequate revenge, but because I must eat more regularly, and I believe that a man should work for his living. I am Vice-President in charge of production, purchasing and engineering for the above concern, which makes the justly famous Universal Filing Cabinets. The board of directors is an unusual lot; although I frankly admitted that I had taught and lectured Business Management all over the country, they thought I knew something practical about it, and gave me this job. I grubbed, and sweated, looked at both sunrise and sunset from factory windows, eliminated time for meals and other non-essentials, and got into the thing with both feet and my head. My reward? Well, three months ago the Sales Department was hollering for the stuff; now I am hollering for orders.

"I didn't start this letter to speak for myself, although the evidence so far is against me, but to mention that I had run across a few of the gang on the main and side streets of New York City and tributary regions. For instance, I met Edward H. Bragg. He is with Eggleston Bros. & Co., who are anxious to sell steel. I buy tons of steel, but he didn't offer to sell me any, so I don't know whether his salesmanship is very poor, or his ethics exceptionally good. I expect the latter, and that he

## WE HAVE BEEN HELPING OTHERS KEEP THE B. T. U. WHOLLY FOR THE PAST 30 YEARS.

HUNDREDS OF TECHNOLOGY MEN KNOW AND ENDORSE OUR WORK AS OF THE HIGHEST GRADE. MAY WE HAVE THE PLEASURE OF SERVING YOU TOO?

**NIGHTINGALE & CHILDS COMPANY**  
205 CONGRESS STREET - BOSTON, MASS.

CONTRACTORS FOR ALL KINDS OF HEAT AND COLD INSULATION





1921 Continued

Telephone & Telegraph Co., 195 Broadway; J. G. Hauber, XIII, 55 Duane Street; Sumner Hayward, X, New York Telephone Co., 104 Broad Street; F. R. Kingman, "Onyx" Hosiery, Inc., Broadway and 24th Street; W. L. Knoepke, VI, Electric Bond & Share Co., 71 Broadway; A. W. Norton, XV, O'Mara & Ormsbee, Inc., 320 Fifth Avenue; R. J. Spitz, X, 200 West 93rd Street; R. R. Whitehouse, XIV, Western Union Telegraph Co., 195 Broadway; R. P. Windisch, XV, Strong, Sturgis, & Co., 11 Wall Street; A. M. Young, V, 17 Gramercy Park; and C. F. Longfellow, Jr., VI-A, American Telephone and Telegraph Co., 195 Broadway.

Nineteen hundred and twenty-one was not well represented at the annual M. I. T. dinner given by the New York Tech Club at the Waldorf-Astoria Hotel on March 7, else the co-eds and good spirits of adjoining classes had attracted many by the time we started counting noses. Here are the ones, — again only 21 in number, — our radio listeners heard in the cheering section: J. W. Barriger, XV, 47 Lincoln Avenue, Newark, N. J.; F. L. Blewer, IX-B; C. C. Carven, IV, 17 Gramercy Park; L. D. Chellis, II; C. A. Clarke, VI; P. T. Coffin, VI-A, Newark Athletic Club, Newark, N. J.; R. H. Gilbert, VI; A. D. Harvey, III, Merrick, L. I., N. Y.; J. G. Hauber, XIII; M. C. Hawes, X, 251 Third Avenue; S. J. Hill, X, 37 Mapes Avenue, Newark, N. J.; H. A. Kaufman, X, 15 West 90th Street; R. W. King, VI, Western Electric Co., 463 West Street; W. L. Knoepke, VI, Electric Bond & Share Co., 71 Broadway; D. G. Morse, X, Hutton Park, West Orange, N. J.; A. P. Munning, 2nd, X, A. P. Munning & Co., Matawan, N. J.; A. W. Norton, XV; J. S. Parsons, XV, 34 Gramercy Park; F. L. Raymond, XV, Sunnyridge Farms, Amesbury, Mass.; R. R. Whitehouse, XIV; and A. M. Young, V.

In connection with Tech Show, we note that none other than R. L. Turner, X, has turned thespian. "General Allaghab, of the Kookoostan Army . . . R. L. Turner, Grad." is the way the program puts it, but then you wouldn't expect a program to tell you that the General is a burnt cork comedian with lines calculated to make the audience laugh or that he puts them over so as to check the calculations.

The performance of the Show at the Hotel Astor on March 18 brought out a goodly bunch of '21-ers. It was impossible to get a complete list, but the following were seen on the floor during the dancing after the performance: F. L. Blewer, IX-B; J. D.

Bowman, VI, Philadelphia Rapid Transit Co.; C. C. Carven, IV; C. A. Clarke, VI; H. J. Fagan, VI, 256 East 203rd Street; R. H. Gilbert, VI; J. G. Hauber, XVIII; Sumner Hayward, X; S. J. Hill, X; I. D. Jakobson, XIII, Jakobson & Peterson, Inc., Foot of 16th Avenue, Brooklyn, N. Y.; A. W. Norton, XV; N. F. Patton, XV, 255 West 92nd Street; J. D. Rockefeller, Jr., IX-B, Deal Beach, N. J.; A. M. Young, V; H. L. Schmidt, XV, Lord & Taylor, 5th Avenue and 39th Street. Note for Ken Akers: "Phlaughcie" Fogler, XIV, was there, — add your own comment.

H. I. Granger, VI, is with Jackson and Moreland, 387 Washington Street, Boston. Harry lives in South Weymouth.

L. J. McGrath, I, 1540 South Walnut Street, Casper, Wyo., is in the drafting room doing general design work for the Standard Oil Co. of Indiana at their plant in Casper. Mac says he received visits from E. A. Hardin, I, and L. L. Stuart, IX, and as he lives on the direct route to Yellowstone Park, he and his wife invite '21-ers passing through next summer to stop over.

Had lunch with C. T. Leander, X, and Sumner Hayward, X, recently. Carl is an equipment sales engineer for the Dorr Company, with classy offices at 247 Park Avenue, New York City, and is specializing on recovery of materials from waste in paper mills. He's traveling so fast he hasn't had time to complete his radio set but promises us some news on the gang when he gets back. Sumner is still pushing a slide rule and juggling figures in the Engineering Department of the New York Telephone Co., 104 Broad Street, New York City, and lives at 80 Eaton Place, East Orange, N. J. The previous report of his engagement was in error to the extent that the young lady is a Simmons graduate but lives in Newark and not Boston as reported. He further reports E. W. Haywood, X, 11 Harwood Street, Lynn, living at home again and working in Boston for some manufacturers of chemical apparatus. Returning to the Dorr offices, met Anthony Anable, XV, who is also a sales equipment engineer for the company, having been in Chicago last summer. His engagement has been announced to Miss Emily Barton of Chestnut Hill. The wedding is to take place in April.

Albert Calvert, VI, is still in the Statistics Department of the Blackstone Valley Gas and Electric Co., and can be reached at 32 Beech Street, Pawtucket, R. I.—H. G. Dooley, XV, is working for the same company.—J. E. Buckley, VI, is in Maine running a ladder factory with O. W. Brown, VI, of Sanford, Maine. (It's hard to squelch a pun on climbing to success!) Thanks, Al, but let us know when you and Bossert next come to visit the fair Brooklynites.

W. H. Ray, I, is district manager of the Tide Water Oil Sales Corporation, Bayonne, N. J. Bill reports O. G. Wilson, X, married and living in Port Arthur, — Texas, we guess; he also sees F. L. Blewer, IX, of Harris, Forbes & Co., 56 William Street, New York City, but says there aren't many '21-ers in his town.

T. B. Card, VI, says it's good to be back in Beantown again after two years in Dayton, Ohio. Tom reports H. A. Tucker, VI, and H. R. Blomquist, VI, working with him in the Electric Engineering Department of Stone & Webster, 147 Milk Street, Boston.

E. B. Roberts, I, is with the U. S. Coast and Geodetic Survey on geodetic surveys which have already taken him to seventeen states. His sole comment is: "Women friendly everywhere." Bob is not married, engaged or anything else.

Besides Sumner Hayward, X, J. S. Cummings, VI, and R. H. Gilbert, VI, are also in the Engineering Department of the New York Telephone Co. at 104 Broad Street, New York City. Fish is in fundamental plan work, finishing the New York telephone system of 1940 and ready to start planning for 1945; he also finds time to teach several classes in electricity at the Bedford Engineering Institute of the Bedford Y. M. C. A. in Brooklyn. Johnny reports Hartwell Flemming, VI, still with the Providence Street Railway Co.—M. C. Hall, VI, American Telephone and Telegraph Co., 195 Broadway, New York City.—W. K. Avery, II, Holmes Electric Protective Co., 25 Halsey Street, Brooklyn, N. Y.

M. C. Hawes, X, Quality Laundry Service, Inc., 251 Third Avenue, New York City, is tackling as a side line a course in chemistry and one in organization and management at Textile Evening High School, New York City. Monny is married. Under "Anything else" on the questionnaire he lists "one baby, aged one month — possible co-ed in Class of 1946."

C. A. Williams, VI, gave us a nice birthday present on the 12th with the first specimen of his chirography we have seen in a long time. Writing from the Engineers' Club of Philadelphia, he says: "Between two nights a week teaching at Drexel Institute and Philadelphia's usual round of gayety, these spare nights are scarce. The people over here work to live, in contrast with our New England friends who live to work."

"Larcom Randall, VI, is in Boston in the printing business

## Essential to Process and Product

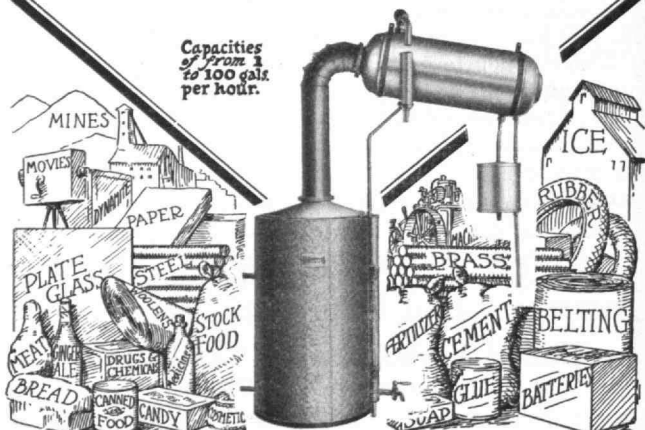
Wherever chemically pure water is required, the cost, quality and supply of this necessity are of utmost importance. It is sound policy to follow the example of the largest and most successful manufacturers. Our records show that a great majority of these leaders have installed both for laboratory and plant use.

### BARNSTEAD WATERSTILLS

Write for Catalogue

Barnstead Still and Sterilizer Co., Inc.

16 Lanesville Terrace, Boston 30, Mass.



1921 Continued

with his father. Haven't heard from him since he started on January 1. His address is East Street, Hingham, Mass. G. E. Shoemaker, Jr., VI, is selling lamps all over the country for the Stewart Electric Co. of Philly, enlightening the world, so to speak. M. S. Sanders, VI, is still with the American Telephone and Telegraph Co. here, 603 Bourse Building.

"E. D. Ryer, VI, is here with the G. E. sales forces, Wither- spoon Building. H. P. Field, VI, and Mrs. Field are here too. Harry is to go to Baltimore soon to sell G. E. stuff. J. D. Bowman, VI, is with the Traffic Department of the Philadelphia Rapid Transit Co., and I understand the cars will soon be running as fast as they are in New York. (That's no compliment, Charlie!)

"A. R. Wood, VI-A, and myself are still with the Transmission and Distribution Department of the Philadelphia Electric Co. Woodie is working on construction, budget, and planning for load increase, while I am struggling with economic studies of our distribution system in order to make it 'more perfect.' I'm looking forward to that reunion in 1925."

Right on the heels of the above came a letter from G. E. Shoemaker, Jr., VI, written in instalments from Lancaster, Harrisburg, and Philly, which calls the Tech bunch in Philadelphia "a sober, righteous crowd." George gives the same news, including: "Charlie Williams is still occupying the large office with non-skid desk top for feet that the Philadelphia Electric furnishes." Wish George would give the details of that wonderful Tech party at a suburban country club, with the decorations, the show, the food (and drink, — how do you get that "righteous" stuff?) the wunnerful women and all. "Sweet daddy, we're not dead yet. More wonderful still, some of us are still at engineering!" Won't someone call at 3727 Chestnut Street, and see if this is the same George Erety we used to know?

I. D. Jakobson, XIII, Foot of 16th Avenue, Brooklyn, N. Y., is in the shipbuilding game, repairing wooden vessels and specializing in harbor craft. Jake says he plays bridge every now and then with A. M. McMorran, II, R. F. Officer, XV, and J. S. Marine, II. To the question of marriage, Jake's high sign is: "Nope, but admire the courage of the fellows that are."

L. W. Conant, XV, is now acting as plant engineer for F. H. Conant's Sons, Inc., furniture manufacturers of Camden, N. Y. It can hardly be said that Larry has "settled down" since being married last June. During the summer and fall he and his bride enjoyed an extended trip nearly encircling the United States. The Great Lakes, Yellowstone, Banff, Lake Louise, Victoria, Vancouver, the Pacific Coast cities, the Grand Canyon, and other points were included in the 8,000 miles which Larry claims to have made in a Buick without trouble of any kind and without even carrying a spare tire. Of course, only a Course XV man would have dared to try it!

E. M. Craig, Jr., XI, North Jersey Water Commission, Wanaque, N. J., is a sanitary engineer for the North Jersey District Water Supply Commission under the direction of Weston & Sampson, Consulting Engineers, Boston, engaged in making a survey of the potable water supplies of northern New Jersey with a view towards their development and use by the state and particularly by the metropolitan district of New Jersey.

H. duP. Baldwin, II, is in cotton mill engineering work with J. E. Serrine and Co., of Greenville, S. C. He says, "Local color, black. The chief attraction of this place is that it's near the mountains where they know how to make the finest 'corn' you ever tasted."

E. R. Haigh, XV, reports seven months service with Louis Fabian Bachrach, Inc., using his inimitable good nature to engineer the photographic game at 214 Book Building, Detroit, Mich. We missed Randy when he called at the Western recently, thereby losing the details of how he has nearly been married forty seven times; however, he seems to have successfully dodged Cupid and his machine gun. Randy saw R. H. Smithwick, III, at the Brunswick when last in Boston; he wants to hear from Dan Harvey, and so do we all.

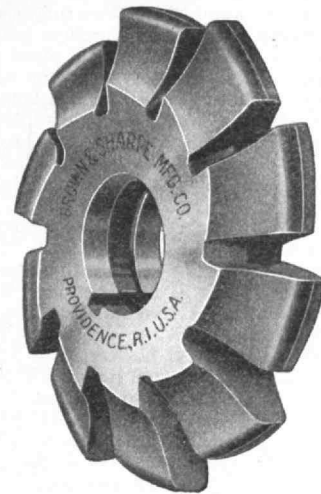
A. P. Munning, 2nd, X, is in charge of the Research and Development Department of A. P. Munning & Co., Matawan, N. J., manufacturers of electroplating and buffing apparatus. He was at the Musical Clubs concert in Newark last Christmas with D. G. Morse, X, D. F. Carpenter, '22, and Sumner Hayward, X. Gus reports A. J. LaPointe, X, doing chemical engineering for the Buckeye Paper Co., Memphis, Tenn. Alex's temporary address is 1064 Poplar Avenue, Memphis; Tenn.

R. A. Eckles, IV, is handling the architectural engineering and business administration for the W. G. Eckles Co., New Castle, Pa. Bob was married in 1922 and has a baby daughter. He says C. F. McGill, IV, is also with the company. Charlie was married last year and moved out to Western Pennsylvania.

R. W. Smith, XII, cheers up this seccing business with a voluminous epistle, still chanting the praise of the Southern belles, and being a good Tarheel, we heartily agree. Dick is still Assistant Geologist on what is now the Division of Geology

# BROWN & SHARPE

## Ground Form Gear Cutters



## Exceed Expectations

THE primary thought behind the development of the Ground-Form Cutter was to obtain a cutter capable of producing greater accuracy of work than could be obtained with one of the un-ground type. Since their introduction they have more than lived up to expectations. Not only do they produce more accurate gears but they do it uniformly. This is due to the ground form which does away with slight distortions caused by hardening. They have exceeded our expectations, for besides greater accuracy they are also giving greater production and longer cutter life. Brown & Sharpe Ground-Form Cutters have proved a real economy to all who use them.



This type of cutter is the most modern gear cutter being made today. It has many advantages over other types. A booklet "Brown & Sharpe Ground-Form Cutters" discusses the reasons why — we will gladly send you a copy on request.

**BROWN & SHARPE MFG. CO.**

Providence, R. I., U. S. A.

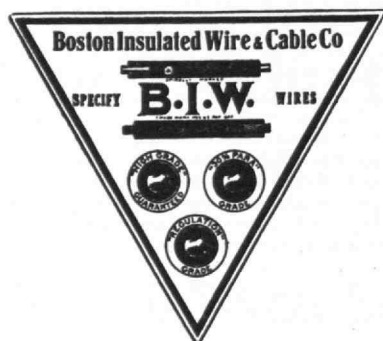


1921 Continued

of the Department of Education of the State of Tennessee, with headquarters at Nashville, and is doing field and office work to result eventually in a bulletin on the phosphate deposits and industry of Tennessee. "I am getting my recreation this winter, aside from the girls, singing in the Nashville Choral Society, the Junior Chamber of Commerce Glee Club, and the Christ Church Choir. Shades of the Technology Glee Club which I did not make!" He reports a visit from J. R. Cudworth, XII, who is an instructor in Mining Engineering, School of Mines, University of Alabama, Tuscaloosa. Announcement has been made of Jim's engagement to Miss Emily Latham, Wellesley '21, from his home town of Norwich, Conn. Dick asks members of Courses III and XII to write to him.

Somewhat belated is the announcement of the arrival of Malcolm Henry Kurth, '44, VI, at the home of Mr. and Mrs. H. R. Kurth, 126 Columbia Street, Cambridge. Chick is a laboratory engineer for the Edison Electric Illuminating Co., of Boston, and has been doing some traveling around the East when he isn't working nights and Sundays preparing for the increased capacity when the Weymouth plant gets going, or fooling with radio. Asked about 1921 at the annual banquet, he says we had a poor showing and offers to help keep the New England crowd together. "Got a fairly complete list of those present, as follows: E. W. Booth, IX, of Tech Show fame; J. D. Crosby, X, ex-sweetheart of June Caprice of the fillums; H. G. Dooley, XV, who showed Matt Brush how to run Hog Island; N. E. Ferguson, I; A. C. Hayden, II; L. M. Hersum, I; F. T. Hill, II; J. L. Hurley, XV; A. J. Johnson, XIV; A. J. Kiley, II, the athlete of the flaming top; R. W. Leach, X; S. E. Lunden, IV; A. S. McLeod, XV; C. H. J. O'Donnell, II; L. C. Pelkus, X; A. E. Povah, II; J. M. Sherman, X; J. B. Smith, VI-A; H. F. Stose, XIV, (ask him how he likes being a chaplain?); K. R. Sutherland, II; George Thomson, X; G. T. Welch, XV; and F. H. Whelan, I. A. L. Kerrigan, VI, is in Boston but I haven't located him. Edward Rogal, VI, is hooked again. (Secretary's Note:—Whatcher mean by that, Chick?) F. W. Adams, X, is at the 'Stute as is W. C. Kohl, VI, both of them instructing." Then Chick, like many others, asks 'steen pages about Western Electric equipment. Guess the company would gain by putting us in the Sales Department!

D. J. Swift, X, is with the United Electric Light & Power Co., 56 Cooper Square, New York City, and reports seeing S. M. Silverstein, X-A, in New York.



### Rubber Insulated Wires—

Including Wires for Buildings, Railway Signal Wires, Telephone Wires, High Voltage Wires, Car Wires.

### Special Cables and Cords—

Deck Cable, Stage Cables, Lamp Cords, Elevator Lighting Control and Annunciator Cables.  
Automobile, Ignition, Starting and Lighting Cables.

## BOSTON INSULATED WIRE AND CABLE CO.

Dorchester District

BOSTON, MASSACHUSETTS

Canadian Factory, Hamilton, Ontario

C. A. Williams, VI, Engineers' Club, 1317 Spruce Street, makes economic analyses of their distribution system for the Philadelphia Electric Co., and aired some of his findings in a paper on "Voltage Fluctuation and its Effect upon Lighting," before the Geographic Sections meeting of the Pennsylvania Electric Association last January. Charlie says he drinks lots of water since Butler arrived in Philly, and then, under "Married, engaged," etc., he pleads guilty only to being drunk. History apparently isn't repeating itself in recent Philly generations!

C. B. Barton, Jr., X, writing from 8 Cumberland Street, Brunswick, Maine, seems to be all wrapped up in paper, as it were. Up to last spring, Charlie was doing his stunt in a small paper mill in upstate New York, but since then he has been located in Maine with the Pjepsot Paper Co., where he is taking an apprentice course with six others, three of them Technologists. He says A. E. Bachmann, X, and M. H. Winchester, II, have left the Pjepsot. Do you know where Red and Duke are hanging their hats, Charlie?

J. J. MacDonald, VII, is an instructor in physiology at the University of Buffalo, 24 High Street, Buffalo, N. Y. He chirps: "Work enjoyable and interesting; students are regular fellows. The biggest event for me, so far, since coming to Buffalo, was the arrival of our baby daughter, now almost four months old and growing fast."

Benjamin Fisher, Jr., II, is now with Lybrand, Ross Bros., and Montgomery, 261 Franklin Street, Boston, Mass.

E. N. Dube, I, has been married since our last entry and has moved to Northampton, Mass., where he is working for the Northampton Street Railway Co. Tech Show and Smith must keep Hamp humming, — witness: "Last summer we built a mile and a quarter of new track besides repairing everything under the sun that has anything to do with a street railway. We rebuilt a trestle and spent a good many precious hours fighting a fire in a coal pocket. The least exciting business is to keep the cars running 365 days in the year. As for local color, the mud is just about the same here as elsewhere, only I come into closer contact with it here!"

E. I. Schock, XIII, 4713 Haldeman Avenue, Louisville, Ky., advises us that water is not used for drinking in Kentucky. Ed is chief draftsman on the design of automatic machinery for the Co-Rim-Co Corp., 206 Central Avenue, Louisville, and writes of the arrival of a future Technologist who is now eight months old. Send us the dope on that February get-together, old man.

H. V. Thaden, II, is in the aeronautical engineering game on lighter than air craft, with the Aircraft Development Corporation, 4-253 General Motors Bldg., Detroit, Mich. Thad remarks: "H. A. Greenwald, II, who is doing time at the Cadillac Motor Car Co., has returned from California, where he reunited with E. G. Ragatz, II. He reports good weather, women, and liquor."

H. A. Greenwald, II, 2539 West Grand Boulevard, Apartment A4, Detroit, Mich., romps in the same day with the added info that he is doing experimental engineering for Cadillac. He admits "almost" on the matrimonial quiz, but adds that the local color is green, — rivals still live in old home town. E. G. Ragatz, II, works for the Union Oil Co., in Los Angeles; A. L. Mock, XIII, is a boiler expert in San Francisco.

A. S. M. Kreeger, II, is Assistant Superintendent of the Lane Cotton Mills Co., of New Orleans, La., where he lives at 1706 Dufossat Street. He says G. H. Burt, II, has been in New Orleans for nearly a year with the Alotex Co., and it looks as if he intends to become a regular Southerner, having married a Louisiana girl just before Christmas.

Wim, Wigor, or Vitality must be the middle name of S. W. Freese, II, normally of 403 Cotton Exchange Building, Fort Worth, Texas, who is now studying chemistry and bacteriology at Trinity College, Cambridge, England. He hasn't talked with a Tech man for the last six months, and wants to get in touch with all the '21-ers in Europe.

M. R. Jenney, VI, of 121 Malvern Street, Melrose, Mass., cuts his info down to merely "patent law, Room 614, 53 State Street, Boston, Mass." Hey, Mel, back out of that case of modestitis and come across with some news!

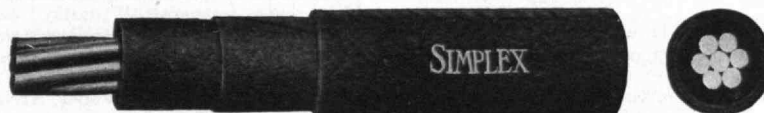
S. E. Moreton, Jr., II, 706 S. Jackson Street, Brookhaven, Miss., was married last November to Miss Eola Williams of Lexington, Miss.

D. B. Carter, XV, 342 Main Street, Glastonbury, Conn., is in production, cost and stores work for the Automatic Refrigerating Co., of Hartford, and was married last summer. Don adds: "C. A. Newton, II, is with Cheney Brothers of South Manchester, Conn. Clint is the father of a son, Guy, born the day before Christmas."

R. B. Frost, X, is running an open-hearth furnace for Charlie Schwab at the Saucon Plant of the Bethlehem Steel Corporation, 41 West Church Street, Bethlehem, Pa.



Ask for  
Specification No. 2053  
for your files



Simcore wires and cables are subjected to voltage tests ranging, according to size, from 33⅓ to 100% in excess of underwriters' requirements; they have a smooth finish, are easy to pull in and can be delivered quickly. Simcore is safe and gives satisfaction.

## SIMPLEX WIRE & CABLE CO

MANUFACTURERS

201 DEVONSHIRE ST., BOSTON 9

CHICAGO SAN FRANCISCO NEW YORK

### 1922

ERIC F. HODGINS, *General Secretary*  
Room 3-205, M. I. T., Cambridge, Mass.

#### Course I

J. F. HENNESSY, *Secretary*, 16 Henry St., Brookline, Mass.

After studying and travelling in Germany for a year, Bill Mueser has returned to New York and is now with Moran, Maurice and Proctor, Consulting Engineers. Ross Pfohl is with the same firm. At Christmas time he became engaged to Miss Edna Meyer of Bronxville, New York.

Bernard Rivkin was married on January 22 to Miss Ruth Lasker, a graduate of Radcliffe in the Class of '23. After a wedding trip to Washington, they will live in Hyde Park.

On a recent Sunday afternoon I spotted Vic Van Neste riding through the Fenway, and stopped traffic long enough to learn that he is in the real estate and contracting business with his brother.

After the first of May you had better send my mail to 29 Hawthorn Road, same town. Not getting married, just moving.

#### Course IV

GEORGE S. HOLDERNESS, *Secretary*, 17 Gramercy Park,  
New York City.

When this contribution to the world's great literature is released from the press, it will mark the completion of the second twelve-month since the Class of '22 was unleashed upon the public. It is an auspicious occasion, and is entitled to just such noteworthy observance as this.

And there are things to say. We have written whole letters when there was not sufficient material for a single sentence. Now, when there are really bona fide, dyed-in-the-wool reports from the class members, we fear and tremble lest we tax the credulity and patience of our multitude of readers. To say nothing of the paper supply of *The Review*.

Our followers in New York recently have raised such a hue and cry over the manner in which we almost overlook them in these letters that we are going to start this one off with a few chirps from the Great Tight Way. As is usually the case, there are business changes to report. Herr Rudie Blatter, beer-

swigger der grosse, has joined up with Carrere and Hastings, and finds his work both interesting and profitable. Rudie still lives at the Beta Club on East Fortieth Street, which is just a few goose-steps from his office. Marion Dimmock, bowling patron, and late curator of the Little Pigeon, is punching the time clock for McKim, Mead and White (we think that is the name; perhaps you have heard of them). Dimmy still is an authority on hotels, and his presence lends an air of prestige and savoir faire to Bert Fenner's little outfit. The new forty-story shack that will replace the Hotel Savoy on Fifth Avenue will be the love-child of Fenner, Dimmock, et al. And, incidentally, Dimmy is living at 32 Washington Square, whose Rose is a more or less familiar character.

Within the last two months both of our representatives with Cross and Cross have pulled up stake and left for other parts. Hemmy is taking a leave of several months prior to leaving for England, where she is threatening to make her home in the future. Of course, we all are trying to dissuade her from this notion. Chris Carven, whom we don't claim as a classmate, but whom we mention on account of the long time he spent in our class, is with H. Chandler Stearns down in the Cunard building, and recently dashed off a set of drawings for the LeBrun Scholarship, which are to be returned to him shortly. Which brings us around to Cass Amon and his latest prize. Cass marked time on the recent B. A. I. D. "Arcade Building" just long enough to make it an even race, and then romped home under blankets for another First Medal. It was easy pickings. His current effort is "A Public Market," which, for fairness' sake, Cass is doing with one hand tied behind him. Just between us, it would be a good thing if he should lose, because the nation's available supply of gold is growing less and less, and the Club's Trophy Room is too cluttered up, anyway.

With which we leave the world's largest city, and essay a check-up on the colonies. They are doing some mighty good work, you know, and we really must encourage them. We have had visits recently from some of the distinguished colonists, and it was mighty good to see them. Not so long ago one J. W. D. Archibald wandered nonchalantly in for a week-end with us, and was the same debonair Britisher as of old. Arch is working for Ritchie and Somebody in Boston, and is the star boarder in the household of G. Dewey Swan and family. Al

1922 Continued

Kruse meandered up from Philly for the Annual Dinner, and honored the 1922 table with his presence, leaving Day and Klauder to hold the bag in the Somnolent City. At the Tech Show we ran into Warren Ferguson, who was in New York for business purposes, and at the show incidentally. In fact, he was not really at the show at all, just having called at the hotel for presenting his compliments to the affair in a general way. We tried to induce him to come in and shuffle his dogs a little, but the glaring absence of any mark of soup or fish in his attire was his excuse for not joining the milling throng. Fergy came down for the Flower Show in Grand Central Palace, taking charge of the exhibit of Lord and Burnham, his employers, and, we suppose, demonstrating the dernier cri in boutonnières, and that sort of thing.

And only today we had a call from Howard Davenport, the one and only Davvy, hero of many an all-night engagement in the Rogers sector and other parts of the Backward Bay. Davvy is with the Western Electric Company in this city, still lives in East Orange, and sings negro spirituals in the St. George's choir down in Stuyvesant Square. It surely carried us back to the good old days when Davvy, in his capacity as raconteur premier, told of the height of familiarity and other equally pleasing anecdotes, and when a charrette was a charrette for a' that.

It is a short step (geographically, only) from New York to Boston, and there we find the usual activity incident to providing the traditional shoes for the proverbial baby (so far our class boasts of nothing more than proverbial babies). Georges Wiren has developed into a bird's-eye artist, and his colorful renderings have attracted many a hard-earned shekel to the enterprises of Stone & Webster. Recently he completed an eagle's eye view of the Keokuk Dam, which showed the whole Mississippi River with the countryside 'roundabout, and by a false move of the brush just missed showing Pine Bluff. Georges is living in his new studio at 36 Joy Street, in the same house as the "Brick Oven," a tea room for which he is consulting architect and general artistic advisor.

While in the neighborhood, we must take a look at Arthur Frappier, and pass a few wise cracks about the boy violinist, and that sort of stuff. Frap is a full-fledged Architect these days, and sports his own stationery by way of proof. His address is 318 Strand Building, Providence, and he has enough work to

keep him busy, besides being official architect for a firm of interior decorators who cater to the Four Hundred of Rhode Island. Because of all of which we nominate him for the Hall of Fame, but chiefly because he spent twenty-two cents for postage to insure our receiving his report in time.

Down in Washington, Bob Albert is in the Municipal Architect's office, as we related before, but now comes the additional information that he also is instructing the youth of the land in the gentle art of architectural design. Bob runs out to George Washington University at nights, and shows them how to wield a wicked Camel's Hairbrush. Henry Buck also is in the Capital, working for Bedford Brown, and during their spare moments Buck and Bob ply their profession under their own firm name. More power to them!

And still there is more success waiting to be reported. Bert Weber, — yes, our Bert — has signed up with one Charles E. White, who was an associate of Bert's father, and they are doing their stuff as White and Weber, Architects, 343 South Dearborn St., Chicago. They have a great deal of work, and more in sight. Good boy, Bert! And, by the way, on the next Easter after this one, Bert is going to present us a nice new sky-piece, because then he will have lost a bet of four years ago to the effect that we would wear the conjugal yoke ere five Easters had passed.

Mark Ellsworth recently left Chicago for good, and travelled all of the way to the Coast before he found the place to flop. We suspect that when the winter reached its stride in the Windy City, Mark's Louisiana bride cast the deciding vote in favor of moving to a warmer clime. At any rate, they now are in Pasadena (for which we envy them), and he is working for Marston, Van Pelt, and Maybury, of that city. Mr. and Mrs. Mark are living at 388 Penn Street, but when you call they probably will be out in their new Ford coupé, with which they hope to see California or bust a balloon tire. However, you might try it.

With which suggestion we finish the real, honest-to-gosh news, and turn now to the business of closing the lodge. This is the eighth letter which has filtered from our pen since we were elected, at graduation, to be the goat, or, officially speaking, the Course Secretary. It is the last for this year, and will be the last for all time if the necessity continues for prodding the classmates for letters. In making a mental resumé of these past eight letters, we are forced to conclude and confess that they were not masterpieces. We even suspect that they were not widely read, even by the class-members themselves. We will go further and admit them guilty of poppycock, banana oil, and all manner of trashy sentiment. But, with all of our secretarial shortcomings, we are forced to claim distinction on two counts: first, that we have never missed an issue for which we were supposed to write, and second (proudly) that not once have we referred to Mah Jongg, King Tut, or the Tea-pot Dome! Which is no small thing if we do say so ourself.

And so we leave you, secretarily speaking, for the year at least. May you all continue high in spirit, and grow rich of purse. And in the practice of your chosen profession may you follow the advice of Prof. Eustace McGargle to his daughter, Poppy, and "never give a sucker an even break."

Courses V and X

S. PARKER MCCONNELL, *Secretary*, 187½ Fairview Avenue, Jersey City, N. J.

Events have been marching right on down here in New York during this past month: events, we mean, of interest to Tech men.

First of all, in chronological order, was the annual New York Alumni Dinner. Our honored gensec, Eric Hodgins, was among the visiting firemen, for the avowed purpose of reporting said dinner for The Review. We must needs take him at his word and say no more, for the very sufficient reason that he rules the galley proofs. It did seem good to see him again. Time was so short that we had opportunity of hearing only a few of his best ones; they, however, were a real treat. Not bad, at all — not good, understand — yet, not bad!

However, as we were about to say, our gensec's pen has regaled you with the complete story of the dinner. Ours but to make brief mention of those representatives of Courses V and X, '22, we saw there. Johnny Church, Bill Noyes and Bill Taft are the ones we remember having seen. Perhaps there were others present, but if so, we missed them in the excitement. Johnny Church is now with the Union Carbide Company in their Sales Department. When we saw him he was on the eve of departure for a two-month trip into West Virginia. We judge that he anticipated a successful selling trip, for he said very little about that end of it. What seemed to hold the forefront of his mind just then was the additional mileage he was about to put between himself and Northampton. Couldn't blame him

## LAPS THAT NEVER LOOSEN

Considering the Fact that

## PACEMAKER BELTING

Is made exclusively from firm, closefibred centerstock leather, we are proud of our success in developing a cement and cementing process that holds the laps as strong and permanent as though soft and low grade stock were used.

### OLMSTED-FLINT COMPANY

FRANK M. SCHIFFMACHER  
President

EVERETT H. CARGEN  
Treasurer

Manufacturers of Leather Belting  
CAMBRIDGE - MASSACHUSETTS

Telephones: University 7540, 7541, 7542, 7543.



## 1922 Continued

much for that, either. Bill Noyes and Bill Taft are holding down the same jobs mentioned in previous issues and seem happy therein.

A little later on in the month came the New York production of Tech Show. It was given this year in the ballroom of the Hotel Astor and was a success from every point of view. The attendance was large; the show itself was very good; and the dancing afterward was fine.

And now for this month's crop of engagements. From the Providence, R. I., *Journal*, we learn that, "The engagement has been announced of Miss Rena Gladys Macomber to George Henry Rhodes, son of Mr. and Mrs. Waldo P. Rhodes, at a dinner given at their home on Morris Avenue. Miss Macomber is a graduate of the Emerson College, Boston, and is a teacher of English and elocution in the High School at Lynn, Mass. Mr. Rhodes is a graduate of Brown University, Class of 1920, and a postgraduate of the Massachusetts Institute of Technology."

We also have at hand a clipping from the *Boston Globe* telling us that "Dr. and Mrs. William C. T. Adams of 105 West Street announce the engagement of their daughter, Beatrice Adams, to Clarence Thomas Mower, son of Mrs. Charlotte Hampton Mower of Malden, Mass. Miss Adams was a member of the Class of 1921, Radcliffe College, and Mr. Mower attended the Massachusetts Institute of Technology."

Roger Ingalls, always a forward looking chap, is doing his bit in providing members for the Class of 1944, or thereabouts, M. I. T. What we are trying to do is to tell you that Roger now has a brand-new son and heir and to offer Roger our heartiest congratulations.

J. B. McFarland who is with the U. S. Cast Iron Pipe Company has been transferred to their San Francisco office. Delightful, but darned distant, say we.

## Course XI

F. J. LAVERTY, *Secretary*, 1208 Washington St.,  
Charleston, W. Va.

The only extraordinary news item that has come to my attention during the past months is the one that pertains to our friend Daniel P. Moynihan. Dan is trying to get his courage up to take unto himself a wife. I am remaining neutral, as I don't want to make any enemies. They all slip sooner or later. The other item is that the ancient though honorable secretary has abandoned his position with the Sanitary District of Chicago to become Assistant Engineer with the West Virginia State Department of Health. Henceforth, my headquarters will be in Charleston, West Virginia.

During the latter part of January I made a visit to Boston and neighboring towns, including Cambridge, and met Hodgins and Hal Wilbur among others. Hal is a busy business man and has been successful in raising a mustache. After calling on Hodgins, Keith's wasn't so good. Hereafter, I shall change the order of my visits.

My new work is very interesting and takes me all over the state inspecting water works, sewage disposal plants and cooperating with the various municipalities. The State Sanitary Engineer with whom I am associated, Mr. E. S. Tisdale, is a 1915 Tech man. My brother 2nd Lieutenants of the Engineer Corps will be pleased to hear that I met Captain Clark in Charleston recently. He has been here for the last five months on a government project. He looks just as fine as he always did, though he claims that he has increased his poundage. He wishes to be remembered to all the members of the Engineer Unit.

## 1923

ROBERT E. HENDRIE, *Secretary*, Room 613, 50 Oliver St.,  
Boston, Mass.

H. L. BOND, *Assistant Secretary*, Room 1-181, M. I. T.,  
Cambridge A, Mass.

We give the following notice preferred position this month: "To the Members of the Class of 1923:

"About a year ago, at one of the most spirited class meetings ever held at Technology, the Class of 1923 adopted the Endowment Plan of 1923 for their Alma Mater. By this act they inaugurated a great service to Technology. In brief, this consisted of a promise by the class to give to Technology at their Twenty-fifth Reunion, some one hundred and twenty-five thousand dollars collected through the channels of the John Hancock Insurance Company.

"Having instituted the Endowment idea (which has been adopted by 1924, and will in all probability be adopted by following classes), and having paid the installment for the first year, the Class of 1923 is up against an even larger problem this year, namely, that of securing one hundred per cent payment

## GOOD LIGHTING OF INDUSTRIAL PLANTS SECURES SAFETY AND EFFICIENCY.

The Code of Lighting for factories, mills and other work places of the State of New Jersey makes excellent recommendations of daylight for the proper lighting of industrial buildings.

Adequate daylight facilities through large window areas, together with light, cheerful surroundings, are highly desirable and necessary features in every work place, and they should be supplied through the necessary channels, not only from the humane standpoint, but also from the viewpoint of maximum plant efficiency.

## Importance of Daylight.

The unusual attention to gas and electric lighting in factories, mills and other work places during the past few years; the perfection of various lamps and auxiliaries, by means of which an improved quality and quantity of lighting effects are obtained; and the care which has been devoted to increasing the efficiency in various industrial apparatus—all go to emphasize the many advantages and economies that result from vital and adequate window space, as a means for daylight in the proper quantities, and in the right direction during those portions of the day when it is available.

## Three Considerations.

Three important considerations of any lighting method are sufficiency, continuity and diffusion, with respect to the daylight illumination of interiors. Sufficiency demands adequate window area; continuity requires (a) large enough window area for use on reasonably dark days, (b) means for reducing the illumination when excessive, due to direct sunshine, and supplementing lighting equipment for use on particularly dark days, and especially towards the close of winter days, (c) diffusion demands interior decorations that are as light in color as practicable for ceilings and upper portions of walls, and of a dull or matt finish, in order that the light which enters the windows or that which is produced by lamps may not be absorbed and lost on the first object that it strikes; but that it may be returned by reflection and thus be used over and over again.

Diffusion also requires that the various sources of light, whether windows, skylights or lamps, be well distributed about the space to be lighted. Light colored surroundings as here suggested result in marked economy, but their main object is perhaps not so much economy as to obtain results that will be satisfactory to the human eye.

## Requirements for natural lighting:

1. The light should be adequate for each employee.
2. The windows should be so spaced and located that daylight is fairly uniform over the working area.
3. The intensities of daylight should be such that artificial light will be required only during those portions of the day when it would naturally be considered necessary.
4. The windows should provide a quality of daylight which will avoid a glare, due to the sun's rays, and light from the sky shining directly into the eye, or where this does not prove to be the case at all parts of the day, window shades or other means should be available to make this end possible.

As will be noticed in the above recommendations, large windows and proper diffusion of daylight are urged, in order to meet the demands of daylight lighting.

Shades may be eliminated and most efficient lighting obtained by the use of Factrolite Glass.

If interested in the distribution of light through Factrolite, we will send you a copy of Laboratory Report—"Factrolited."

## MISSISSIPPI WIRE GLASS CO.,

220 Fifth Avenue,

St. Louis.

New York.

Chicago.

1923 Continued

on its policies. The future of the Technology Class Endowment depends upon the outcome of 1923's payments this year. All classes are watching the outcome. The class is scattered all over the country, but this separation should not jeopardize the spirit of 1923. We, as representatives of 1923, ask you to make every effort to do your part towards the one hundred per cent goal. Will you as a loyal member of 1923 show the same spirit as you did at that memorable class meeting on May 2, 1923, when you said, 'We have heard enough, give us the policies?' It is up to you, classmates; what is your answer?

Robert P. Shaw  
for the 1923 Class Officers"

## Course VI

ALBERT J. PYLE, Secretary, United Power & Light Co.,  
Grace, Idaho

Some of the fellows down in Pennsylvania and Jersey are acknowledging our column in The Review, and a few squibs have come in.

Howard Dexter says: "I've spent a great deal of my time, since I came out here with the West Penn Power Co., trying to decide what good an electrical engineer is, anyhow. This power game is great sport. To be well fitted for it, the gang around the office think you have to be everything from office boy to accountant to hold down the job of a so-called electrical engineer. Padgett, from Washington, is with the same company taking the student engineering course, and the only other member of '23, VI, in Pittsburgh. There are about ten members of the class in the district and we manage to get together at the monthly meetings of the Alumni Association."

Our sympathies go out to Dick Frazier following the death of his father on February 5, after an attack of pneumonia. Dick is with the Railway and Industrial Engineering Co., South Greensburg, Pa., manufacturers of outdoor sub-station equipment.

Listen to R. J. Evans' talk about meters: "I've been with the Public Service Electric Co. in Newark, N. J., since leaving school, and recently have been transferred to Trenton, being connected with the Meter Department. I know a lot more about that mythical instrument, the watt-hour meter, than when I had finished Pop Laws' experiments. Have run across Ed Thimme, who is taking the cadet course with the Electric Co., and Andem, who is with the P. S. Production Co. Kleinberger

## PRINTING

An industry requiring an appreciation of the fine arts.

An industry requiring expert technical knowledge and mechanical ability.

An industry requiring an understanding of the sales problems of all industries.

When you buy printing, buy it where all the requirements of the industry are fulfilled.

## The Murray Printing Company

At Kendall Square  
Cambridge

is in Newark with the P. S. laboratory and rumor has it that F. J. Griffin (he of the nimble tongue) is also adding dollars to the Production Company's coffers."

Breese J. Stevens has met several Techites. Listen: "I've been with the Bell Telephone Co. of Pennsylvania since last July. After I finished the fourteen weeks of the training course, I was placed in the Transmission Department where the work has been almost entirely of a theoretical nature. Benjamin Drisko is also here in this department and together we are going to revise the methods of calculating line impedance, etc."

"Sweet, Hank Davis, Dambly, Charlie Williams and Jim Coleman are with the Philadelphia Electric Co. There are quite a number of M. I. T. men around here, so I am still among friends."

A chain letter sent out by Tom Rounds made the circuit in record time, and came back just in time to make this issue. The idea evoked considerable enthusiasm and we shall try it in different quarters.

Tom started the drool by telling about a 105-mile-an-hour test on a new Paris-Orleans locomotive built by the General Electric at Erie. A 150-ton electric locomotive, for Mexican railways, succeeded in stalling a steam locomotive of about the same weight, after the latter had been given a ten-mile per hour start. The Erie shops are very busy; Tom has been working overtime steadily for several weeks.

The letter next went to Ken Andem, with the Public Service Production Co. in Newark, N. J. We realize why Ken selected Newark when he says he can make the high lights of Broadway in forty minutes. Such a lark, however, makes the alarm go off terribly early the next morning, according to him. Ken says the biggest thing right now around Newark is the Kearny generating plant, which when finished will likely be incorporated in the super-power system. The plant will have 410,000 KVA capacity and will cost \$20,000,000.

Ed Thimme came next. He says: "I finally decided to go with the Public Service Co., and am located at Essex (N. J.) power station, the present largest plant in the system, with 190,900 KVA capacity. Our department does all the testing, and long water rate turbine tests and boiler tests of all kinds are common. We've had a chance to nose into all phases of power plant work. P. S. is floating a \$10,000,000 customer-ownership stock drive, and in working on the drive publicity, I've had a chance to get all over the state. The corporation is growing bigger every day, so that there is lots of opportunity for a budding engineer."

"I'm going to drive up to Boston for a four-day vacation. It will seem good to see the old place, the Faculty and what is left of the old gang. A look at the old boathouse will sure make me feel homesick, lonesome, or something like that."

Pete MacKinnon thinks nothing of a little cross-country trip now that he is with New York Central. Can you beat this: "I returned to Ossining last evening, only to find an urgent request to come up to Boston today (Sunday!)."

"I tied up with the New York Central on the first of last August under the camouflage of special engineering apprentice, electric division. That means that I do anything and everything connected with the electrically operated terminal division of our great and glorious system. We're electrified as far as Croton-on-Hudson of the River Division (34 miles) and as far as North White Plains on the Harlem Division (20 miles). Most of my work has been in the routine shop work so far — car and locomotive repairs and maintenance. For the past month, however, I've had the interesting job of personally escorting some thirty new suburban cars from the Standard Steel Car Co.'s plant at Hammond, Ind., where they were built, to our shop at Harmon, where we will equip them for electric operation, using some of Tommy Rounds' General Electric railway supplies. On my last trip through, we stopped right beside the General Electric test track at Erie, and I saw some of Tommy's new 'Mexicanos' being tried out. In fact, one of the men on the test came over to look at my cars, and after chewing the fat for a while, I learned there was an M. I. T. man at his plant, but he couldn't think of his name. Two days later, I got the letter which showed it must have been Tom Rounds. A small world, eh?"

"I'm not quite running the New York Central yet, but have hopes, being young and foolish. It's an interesting job. Free transportation — which means a lot when your friends and family are scattered from New York and Boston to Chicago."

## Course VI-A

FRANCIS T. HAZELTINE, Secretary, 562 Newbury St.,  
Boston, Mass.

Three or four of us here are doing our theses with the General Electric, and the gravest error which it is possible to commit is to ask us how our theses are coming on. It is generally admitted to be sufficient reason for almost any action.

1923 Continued

In one more week we go back to the Institute for our last term, and you know how good that last term looks to a poor Tech Man. But all things must come to an end finally, which is somewhat encouraging.

Hugh Spencer claims to have found what is the matter with the lighting system at the plant, although no one has been aware there was anything wrong. According to Hugh, the whole job's a mess and will all have to be done over. He thinks that the mercury lamp is so good that it ought to be distributed to Tech students to replace the midnight oil, but I'm a bit skeptical on that point too. And, besides, they would probably take it out of our Lab deposits, which are overworked already.

Thompson and Carper are progressing famously with their flux investigations, except for numerous small explosions of apparatus, which they declare they are mighty thankful doesn't belong to the Institute. There are some compensations in doing a thesis here, after all.

Zangwill quit his job with the Doc in 2nd No. 68 and is working on telephone apparatus. Zang claims that the job he has now carries more overtime than any other position in the works. According to reports, he is about ready to retire and go into some kind of clothing business.

Al Hartwright started in on pure research work, but for the last few weeks has been making mudpies at so much a hundred. Don't mention this subject to him. It's not really safe.

Bob Henderson says he is drafting, but I personally think he starts spelling it with a "g." There are too many blondes in his office entirely, and if you believe Bob, they sure can tell some rip snortin' good stories.

Dag Norwood started on turbines, in the shop, but he has been shifted to calculating. Now he wears a white collar and claims he is an "Engineer, by Gosh." I don't think he is, though, 'cause he has to bring his own slipstick.

I've been trying all term to find out what Bob Shaw's job is, but so far I haven't succeeded.

I'm still keeping a careful eye on the shimmying field of the earth, but it is a sort of temperamental critter.

#### Course X

R. K. TURNER, *Secretary*, 61 Brookline St., Chestnut Hill, Mass.

The following note has been received by the Secretary from Mike Molstad on the letterhead of the "United States Department of Agriculture, Fixed Nitrogen Research Laboratory, Washington:"

"You are as valiant as ever, I see, when you step forward to take charge of the Course X news. More power to you; I'd like to know what the gang is doing.

"My work here is in connection with the synthetic ammonia game, and am putting in my time both on experimental and design problems.

"Am still single, and correspondingly happy. I haven't been deluded by the statement that two can live as cheaply as one. The only case I know of is a flea on a dog.

"Am expecting to see Tech well represented at the spring meeting of the American Chemical Society here in April. My best regards to the fellows still retained at the factory on the Charles."

#### Course XIV

FRANK M. GENTRY, *Secretary*,

Room 1522, New York Edison Bldg., 130 East 15th St.,  
New York, N. Y.

"The day was dark and dreary" and a wintry rain drizzled down between the skyscrapers of Manhattan. But such a spasm of the elements little discouraged our connoisseur of feminine beauty, for Johnny Sands was wrapped in studies of les beaux arts a' la Ziegfeld when come upon by your Course Secretary. Although you may be assured that the mathematical probabilities of such an event are almost beyond computation, the fact remains one of record. After a bit of handshaking and retiring to an apartment on Fifty-fifth Street, it was learned that Johnny was en route from Huntington, W. Va., where he is employed at the International Nickel Company's rolling mill, to Boston for a visit. Johnny has been doing some interesting research in the metallurgy of monel metal.

Perhaps your Secretary is not alert enough for our active course or perhaps his ears were considerably impaired by the steel refining furnace in the Applied Electrochem. Lab., but be the cause what it may, harken back to September 12, 1922, and we have the announcement of the engagement of Miss Dorothy Light to Mr. John Woodbury Sands. Belated though it may be, the unknowing, unsuspecting of us, give our congratulations.

Ed Roll has been strangely silent since the dress parade in sable shrouds, but rumors have been afloat that he was frequenting the rendezvous of yore. And now at last comes a tiny

## When your customer talks about you

### Does he say the right things?

"THE best advertising we get comes from our pleased customers," says many a business man.

That *is* the best kind of advertising — but what do these customers say?

Do they talk about the points you would like to have them talk about? Are they specific? Or do they really know why they are satisfied with what you give them.

Advertise a little to your customers. Tell them why they are doing the right thing to buy from you. Send them at regular intervals a printed booklet or folder or house organ that will give them a chance to know your story as you know it — to tell your story the way you want to have it told.

Your customers want to brag about your service. They want to feel sure they are doing exactly the right thing by dealing with you. Give them this information. See that everybody in their company knows — not just the man you sell to. When you send this kind of direct advertising to customers, you are writing your own word-of-mouth advertisement.

See to it that when your customer mentions your name, he sows exactly the kind of selling seed you want him to sow. Furnish him the seed. Put him on your mailing list and then be sure that the mailings you send are well done and plentiful.

If you don't know how to do it, it's easy to find out. Talk to one of the printers who specialize in this kind of work — fine direct-by-mail advertising.

Better paper and better printing never fail the man who seriously tries to get the most out of them.

*This advertisement is reprinted  
through the courtesy of the S. D.  
Warren Paper Co.*

**PERRY & ELLIOTT CO.**

*Printers of THE TECHNOLOGY REVIEW*

146 Summer Street  
BOSTON, - - MASS.



1923 Continued

envelope, two by three inches, I should judge. A touch of gold and six engraved words; let me read it to you. "Doris Viola Davis, Edward Palmer Roll, Jr." And once again the Course Secretary sends the best wishes of XIV.

Permit me to carry you a few months back to a certain evening in May "when good fellows got together" and listened to an after-banquet speech of the father of our course. Ah, how little deserving we felt of those precious Roman numerals, XIV, when we faced the charge of not having properly maintained the matrimonial traditions of our antecedents. But rapidly succeeding events have amply demonstrated that among our number were those of graver wisdom than any *à priori* considerations would have led us to believe. Hardly had we tucked our little red-ribbon-tied parchment away into oblivion when, without the ceremony of graduation, we received another sample of the engraver's art. Duke Ducote had forsaken the order of bachelorhood and — well, he hasn't been heard from since! The sun's azimuth had changed less than fifteen degrees after your Secretary had mailed a letter to *The Review*, when a card brought the announcement of the engagement of Mr. Edwin Elliott Turner, Jr., to Miss Ethel Marion Darkin! This is none other than our own dear Ed of eddie current fame. But the tale endeth not here. Your Secretary knows not how it happened, for Doc said nothing about it to him, but the November *Review* announced the engagement of Roscoe Smith to Miss Eleanor M. Sutton! We have already congratulated Duke so here, fellows, are our heartiest for Ed and Doc.

Two of our illustrious compatriots have not been venture-some with the pen, but it is whispered about that Oscar Perkins is working for the Technicolor Moving Picture Company in Boston and Eddie Turner some months ago was assembling induction motors in a student course with the Holtzer-Cabot Co. of Jamaica Plain.

At last Ned Frank decided that the entropy of the system was not exactly what it should be and worked up enough free energy to write a letter. "And I am a mighty (3) assistant in the Dynamo Lab," he says, "and strange to relate the work is not extremely hard and lots of fun. My studies have not suffered and I am plugging along towards that old Ph.D. Wonder if I'll ever get there? I like the work and am delving deeper and deeper into the good old math.

"The lab has lost its pep, though things point to a lot of research on modern atomistics and electronics being started. I

myself will probably go into photochemistry with Stocky or into fused salt electrochemistry, although I have been seriously considering some research in modern physics. The more I study graduate work I am driven to have faith in nothing but good old thermodynamics. There is surely a large field for research in almost any problem you could think of." Well, Ned, we hope you get that Doctorate; to keep up the plugging is the only way!

Now, fond reader, picture to yourself one S. F. Brown in the rôle of a research chemist. If reading is believing, here is what Brownie has to say. "I am now employed by the Dennison Manufacturing Company of Framingham, Mass. In fact, I have now held that job for a number of months in spite of my distaste for work. I have used every course that I ever studied (2) at the Institute, including precision of measurements which is very handy in explaining mistakes and variations. I am very much pleased with the job and the days are hardly long enough. It is hard to explain the variety of work that I have to do. It is divided into two parts; routine and research. The routine covers all the control work and testing of materials. I am doing less of this every day but still am handling the pigments, aniline colors and casein. This takes about one day a week and the rest of the time I work on the other division. Have already finished up problems in photoengraving, non-warping glue, fingerprints, methods of testing fibre cases, loft drying, etc. Even hydrogen ion concentrations are important in glues, so you see that Electrochem was not such a tough preparation for this work.

"I think that is enough for the job but that is not all. Wellesley has not moved and the old 'boiler' still limps along. This does not mean that I frequent the place as I once did, but I have the satisfaction of knowing I can go if I wish. No more being broke as long as I stay at this job for pay day comes regularly and shortly I shall be able to save half of my income. In fact, I have decided to get married and you are the first to know it. June, 1943, is the date. Now I must find the girl."

Just before release, Duke Ducote revealed his hiding place as New Orleans, La., where he holds the place of Distribution Engineer with the New Orleans Public Service Co. He says that after the last three or four hectic weeks at the 'Stute he felt he needed a rest, so he took a vacation until September. He is at work on the design of a four thousand volt primary distributing system.

This is the last appearance of XIV notes until the fall, we are informed by the Gensec. This will give some of our silent partners a chance to speak up. Your Secretary is much pleased with the way most of the fellows in the course have cooperated in furnishing news about themselves and others. He appreciates the assistance that you have given him and trusts that you will continue to participate regularly in the affairs of your course. At first, news was slow arriving, but this was to be expected from the readjustment following graduation. In fact, a few of us haven't become settled yet and remain to be heard from. These are especially urged to write.

#### Course XV

E. H. MILLER, *Secretary*, 547 Lake Ave., Rochester, N. Y.

W. H. Donnelly, who recently returned to Rochester, is now working at the J. P. Smith Printing Co. He is in his shirt sleeves from early 'till late, "doing up the plant," with a "niche" in production work, as the objective.

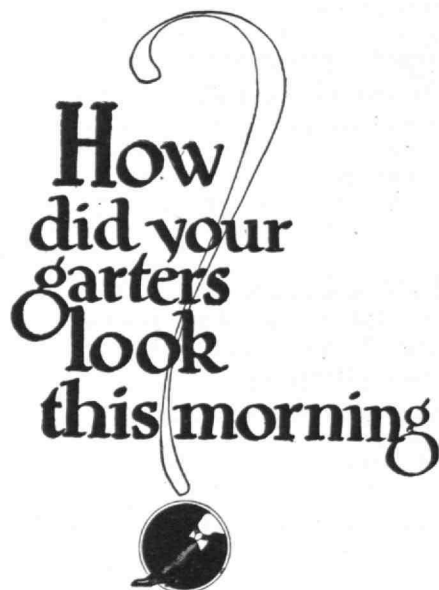
At the Alumni banquet held recently in New York, Course XV of the Class of 1923 had a table of a dozen men, chiefly working in and around New York. The banquet, itself, was a real event, and doubtless was enjoyed over the radio by many others.

O. N. Stewart is in Cleveland working as assistant superintendent of a contracting concern in Cleveland, "of long standing reputation and good-will." He writes that there is quite an active lunch club, composed of eight or ten recent graduates. Similar clubs are functioning in Rochester, and in Buffalo.

Cub Hubbard is also settled in Cleveland, for a while.—Hearsay has it that Charlie Toll is married. How, who, or why, we haven't heard yet, but, at any rate, we extend our congratulations, and best wishes.—Speaking of marriage, Bill Vicinus is completely domesticated at 754 Culver Road, Rochester, N. Y., and still underwrites the adventure.

We want more news written in. Most of the fellows feel that they have little fame to spread. However, if you are interested in hearing about where the other fellow is located, what he is doing, etc., he will be interested in hearing of you. Especially the Course fifteeners that haven't been chronicled, please take note, and drop that postal card today to 547 Lake Avenue, Rochester. What we want is the town, the job, the girl, and any funny or otherwise interesting sidelights.

Just received a letter from Andy Crowley who is working for the Sullivan Machinery Company, manufacturers of mining



TREAT YOURSELF to a fresh pair today

# Boston Garter

GEORGE FROST COMPANY, Makers, BOSTON

1923 Continued

and quarrying machinery in Chicago. He says "the lack of news from us reminded him that he might do his bit," and here is his dope. (If more felt as he does, we'd have some hot dope every time.)

Bob Scott, Jack Storm, George Rowes and Ben Lane are all working for the same company. Ben Lane is a sales engineer, working from their California Branch office at San Francisco. He covers Northern California and adjacent states. Bob Scott, in St. Louis, visits coal mines in his territory, as sales engineer. George Rowen, in the same capacity, is attached to the Boston office and his territory is Massachusetts, Connecticut and Rhode Island. Jack Storm is in the general office with Andy as Assistant Engineer in the pneumatic pumping department. Andy is in the Chicago District Sales office. His territory consists of Indiana, north of Indianapolis and a section of eastern Illinois

F. P. Montgomery, '02 Pres.

R. J. Marlow, '17, Treas.

**F. P. MONTGOMERY & CO.**

INSURANCE

100 WILLIAM STREET

NEW YORK CITY

Headquarters for  
LABORATORY APPARATUS AND CHEMICAL REAGENTS

**EIMER & AMEND**

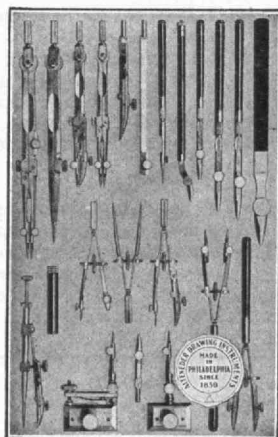
Established 1851

NEW YORK, N. Y.

Third Ave., 18th to 19th Street

**BUFF****Transits and Levels**

are used on the largest work where utmost precision is required. *New catalog just issued.*

**BUFF & BUFF CO., Boston 30, Mass.***Rear 98 Green St., Jamaica Plain*

## Alteneder Drawing Instruments

Appreciated the world over for their excellence and universally used by the expert engineer and architect

*Catalogue on Request***Theo. Alteneder & Sons**

1217 Spring Garden St., Phila.

**CHARLES H. JOHNSON**

M. I. T., '05

*New England Mutual Life Insurance Company*

176 FEDERAL STREET

Main 5571

BOSTON, MASS.

**THE ATLANTIC WORKS**

Incorporated 1853

BORDER, MAVERICK AND NEW STREETS, EAST BOSTON

*Builders of Stationary and Marine Boilers*

Steamships, Towboats, Steam Yachts and Heavy Machinery

**SAMSON CORDAGE WORKS**

MANUFACTURERS OF  
BRAIDED CORDAGE  
AND COTTON TWINES



SASH CORD, CLOTHES  
LINES, SMALL LINES  
ETC. *SEND FOR CATALOG*

**BOSTON****MASS.****MERRIMAC CHEMICAL CO.**

148 STATE STREET, BOSTON, MASSACHUSETTS

WORKS AT

WOBURN AND EVERETT, MASSACHUSETTS

*THE largest and oldest chemical concern  
in New England.*

FOUNDED  
IN 1853

**Spaulding-Moss Company**

Manufacturing Blue Printers  
Photostat and Litho Prints  
Drawing and Artist Supplies

A. H. SPAULDING '14  
P. B. TERRY '13

42 Franklin Street  
BOSTON  
Tel. Main 6000

**GENERAL RADIO CO.***Manufacturers of*

**Radio and Electrical Laboratory Apparatus**  
**CAMBRIDGE MASSACHUSETTS**

BULLETIN H SENT ON REQUEST

## Classified Advertising

Mail addressed to a designation in care of this magazine will be promptly forwarded to the Advertiser.

Copy for advertisements must reach The Review by the tenth of the month preceding date of issue. The magazine goes on sale the 25th.

**RATES—Positions Vacant:** No display, 6 cents per word, minimum charge \$1.50, payable in advance.

**Positions Wanted:** No display, 3 cents per word, minimum charge \$0.75, payable in advance.

*The "Positions Wanted" Column is open only to Members of the Alumni Association in good standing.*

### Positions Vacant

**A**LARGE national manufacturing company is in need of a young graduate who is interested in metallurgical work. Duties at first will be to determine proper materials for various purposes around the plant, together with some inspection work of material being purchased. Salary to start \$125.00 a month. Graduate of Courses V or X preferred. Address TECHNOLOGY REVIEW, D 3079.

**A**N electric light and power company located in New York State is in the market for some young engineers with one or two years' experience in power plant work to become power salesmen. Knowledge of the methods of manufacturing and distributing power, coupled with a pleasing personality are essential qualifications. Preference will be given to men residing in or near western New York State. Address TECHNOLOGY REVIEW, D3080.

**F**IRM located in the vicinity of Boston has need for a commercial photographer from twenty-five to thirty years of age, who has some knowledge of color separation as done in connection with multi-color process printing. Excellent prospects for advancement will be given to a suitable man. Salary will be arranged to suit applicant's experience and can be made satisfactory. Address TECHNOLOGY REVIEW, D3077.

**I**NDUSTRIAL physicist who possesses energy, initiative, ingenuity and the ability to associate well with his co-workers is wanted by a firm of glass manufacturers to undertake a new development. Candidate should have graduated from Course VIII and should have had at least five years' experience, details of which should be included with application. Address TECHNOLOGY REVIEW, D3082.

**M**EN between 25 and 30 years of age who are interested in sales engineering and who have suitable personalities for such work will find a good opportunity in the New England territory with a nationally advertised company handling building materials. The type of man who is wanted should not be involved in social activities and should be willing to devote his entire attention to business. In replying, give outline of previous experience. Address TECHNOLOGY REVIEW, D3078.

**R**ECENT graduates who are interested in industrial engineering are wanted by a large company operating several plants, to work on the installation of planning departments in these plants. Acquaintance with piece work and time study methods is desirable but not necessary, providing the man is of the proper calibre. Address TECHNOLOGY REVIEW, D 3075.

**S**ALES engineers wanted for a long-established firm, manufacturing graphite products and refractory materials. Candidates should have some acquaintance with such products and their uses and should have had at least four or five years of business or industrial experience since graduation. This is an exceptionally good opportunity to connect with a progressive firm. Address TECHNOLOGY REVIEW, D3081.

**W**ESTERN technical school needs an instructor in physics for next year. Work will include instruction in sophomore physics with recitations and laboratory. Candidate should have had about a year's teaching experience and will be paid \$2000 for nine months. Address TECHNOLOGY REVIEW, D3083.

### Positions Wanted

**A**HIGH-CLASS chemist with long experience as chief chemist with companies manufacturing soaps, fertilizers, glues, vegetable oils, paper, glycerine, etc., is available for a position in the Middle West or on the Pacific Coast. If you have need for a high-grade and conscientious chemist whose technical equipment is exceptionally broad and thorough, you can, by answering this ad, get in touch with such a man. Address TECHNOLOGY REVIEW, D 4014.

**A**SSISTANT to Executive. Can you use the services of a 1918 graduate? Four years' general office experience with industrial and financial concerns. Personally conducted business in construction line for one year. This work included the hiring and supervising of five to seven men, securing business, establishing credit, estimating, and collecting bills. Address TECHNOLOGY REVIEW, R 2059.

**E**LECTRICAL engineer with a record of broad experience in power plant and industrial electrical work, in both construction and operation, is available for a permanent connection. Is willing to go to any part of the world under proper conditions. Can speak Portuguese and has some acquaintance with French and Spanish. A firm having need of a man who can put his best efforts into energetic and comprehensive development, reconstruction or expansion of an industrial electrical plant will do well to write to TECHNOLOGY REVIEW, D 4010.

**G**RADUATE with over twenty years' experience, mostly in sales engineering and management, is open for a connection with a small, sound concern in a sales executive capacity. Product should be mechanical in nature. Can invest capital if desired and can furnish upon request a complete record showing continuous results. Salary desired from six to seven thousand dollars, depending upon future prospects. Address TECHNOLOGY REVIEW, D 4015.

**I**NDUSTRIAL Traffic Manager, at present acting in a consulting capacity, is forced, on account of partner's health, to seek connections with some concern which needs the services of one who thoroughly understands all phases of interstate commerce shipping, including rates, routes, classifications, special services and privileges, and the rules, regulations, and orders of the Interstate Commerce Commission. Address TECHNOLOGY REVIEW, D 4013.

**T**ECHNOLOGY graduate, 48 years of age, with a long and successful record in the manufacture of metal working machinery and in the drawing and rolling of steel is at present open for a new position. Coupled with his thorough technical knowledge he has a goodly share of administrative capacity and executive personality. Address TECHNOLOGY REVIEW, D 4012.

### EXECUTIVES

William L. Fletcher, Inc., acting as employment managers for several hundred corporations, constantly has from 50 to 100 positions open for high grade men. Our Technical Department under the direction of a competent engineer can locate exactly the right man for any worthwhile position requiring technical education and experience. Our folder "The Story of an Interesting Business" will help you to understand exactly what we do and how we do it. Sent to employers, without obligation, upon request.

93 FEDERAL STREET

BOSTON, MASS.



# Professional Cards

*A Directory of Technology Graduates and Other Qualified Engineers*

## FAY, SPOFFORD & THORNDIKE CONSULTING ENGINEERS

200 DEVONSHIRE STREET, BOSTON

INVESTIGATIONS      REPORTS  
DESIGNS      ENGINEERING SUPERVISION  
ENGINEERING MANAGEMENT      VALUATIONS

BRIDGES      BUILDINGS      FOUNDATIONS  
PORT DEVELOPMENTS      RIVER AND HARBOR WORKS  
INDUSTRIAL PLANTS      HYDRAULIC DEVELOPMENTS  
WATER AND SEWERAGE SYSTEM

## METCALF & EDDY 14 BEACON STREET, BOSTON, MASS. Consulting Engineers

LEONARD METCALF, '92    HARRISON P. EDDY    CHARLES W. SHERMAN, '90  
ALMON L. FALES    FRANK A. MARSTON    JOHN P. WENTWORTH '10

Water Works, Sewerage Works, Industrial Wastes, Municipal Refuse, Drainage, Flood Protection, Supervision of Construction and Operation, Valuations, Laboratory for Chemical and Biological Analyses.

## CHARLES T. MAIN ENGINEER

200 DEVONSHIRE STREET, BOSTON, MASS.

## T. C. DESMOND & CO., INC. BUILDING CONSTRUCTION

247 PARK AVENUE      -      NEW YORK CITY

THOMAS C. DESMOND, M. I. T., '09, President

## STANLEY G. H. FITCH M. I. T. '00

CERTIFIED PUBLIC ACCOUNTANT

131 State Street      -      Boston, Mass.

of PATTERSON, TEELE & DENNIS  
New York, Boston, Washington and Baltimore

## WILLIAM T. REED COMPANY

BUILDING CONSTRUCTION

200 DEVONSHIRE STREET      BOSTON 9, MASS.

## CHARLES S. GOODING, '79

Solicitor of Patents  
Mechanical Engineer

27 SCHOOL STREET      -      BOSTON 9

1923 Continued

around Cook County. Wes Manville, with Ray St. Laurent, '21, and George Dakin, '22, is with the Standard Oil Company at Whiting, taking a course in Lubrication, preparatory to going on the road as company lubrication experts. He and several others there want to hear news of the proposed "Second 500 Club" otherwise to be called "The Stavers," started by Freeland. Let's hear about it in the next issue if possible. The men he sees are all for it and I can say the same.

We quoted Ray Brink as having met Bill Hull and George Barnes in the notes recently. He corrects us in that it was Bob Hull and Ed Barnes whom he saw.

The Assistant Secretary received too late for the last Review, extracts from a letter to John Nason from Phil Coleman dated February 16 at Paterson, N. J. They follow:

"Elliott Adams is hard at work in Pottstown, Pa., learning the knitting business in a moderate-sized plant, owned by the father of a friend of his. He is the only technical man in the

Dugald C. Jackson

Edward L. Moreland

## JACKSON & MORELAND CONSULTING ENGINEERS

387 WASHINGTON ST.

BOSTON, MASS.

## GEORGE P. DIKE M. I. T. ex '99

Attorney-at-Law and Solicitor of Patents

350 Tremont Building, Boston, Mass.

of MACLEOD, CALVER, COPELAND & DIKE, Boston and Washington

## P. F. MAHER, '17 Public Accountant

7 JUSTIN ROAD, BRIGHTON, MASS.

Audits    Investigations    Systems    Tax Returns

FORMERLY MEMBER EXAMINING CORPS - U. S. PATENT OFFICE

## SAMUEL SIEGEL M. I. T. '17

GEORGETOWN LAW SCHOOL '21

SOLICITOR OF PATENTS

1 BEACON ST.

BOSTON

place, and seems to have a bright future. The mill is being enlarged. If Elliott likes the work, and if all goes well, I wouldn't be surprised to see him as the big cheese in a comparatively short time.—Gordon is working hard. Perhaps you know that he made Tau Beta Phi. He certainly deserves it.

"Ed and Jammer are rooming together. Ed is a part time assistant in Course I. P. J. cuts classes at Harvard and plays on a switchboard on Beacon Street. P. J. was down for the Harvard-Princeton game in November. We saw him then. Ed came down for Christmas, and although he came primarily to see his girl, we managed to catch a glimpse of him."



Attachments — 8' length Hose  
Hose Connector  
Wall Handle  
Upholstery Tool  
Wall Brush  
Library Tool

## HARNESSED AIR IN THE HOME

An unseen servant that works willingly and thoroughly—this is the service of the model 15 Sturtevant Vacuum Cleaner. Quickly and easily, the Sturtevant Vacuum Cleaner removes not only the surface litter but ALL the dirt from every rug. This thorough cleaning brings back the beauty of the pattern and prolongs the life of your rugs by removing the grit that cuts the fibres. Attachments for EVERY corner and crevice that dirt knows.

You can place a model 15 in your home, confident that it will be a real servant; for 60 years of Sturtevant experience in harnessing air has been built into this cleaner that really cleans.

Sturtevant will work economically in your home; and Sturtevant engineers will tell you how harnessed air can bring economy in your plant or factory.

BRING YOUR PROBLEM TO STURTEVANT

# B. F. STURTEVANT COMPANY

### Sales Engineering Offices

Atlanta, Ga.  
Boston, Mass.  
Buffalo, N. Y.  
Camden, N. J.  
Chicago, Ill.  
Cincinnati, Ohio  
Cleveland, Ohio  
Dallas, Tex.  
Detroit, Mich.  
Hartford, Conn.  
Indianapolis, Ind.  
Washington, D. C.  
Los Angeles, Cal.  
Montreal, P. Q.  
New York City  
Pittsburgh, Pa.  
Portland, Ore.  
Rochester, N. Y.  
St. Louis, Mo.  
Salt Lake City, Utah  
San Francisco, Cal.  
Seattle, Wash.  
Toronto, Ont.

### Plants located at

Hyde Park, Mass.  
Sturtevant, Wis.  
Berkeley, Cal.  
Framingham, Mass.  
Camden, N. J.  
Galt, Ontario

### Foreign Representatives

Sturtevant Engineering Co. Ltd. London  
Sturtevant Cie Paris  
American Trading Co. Tokio  
American Trading Co. Shanghai  
Cotton Neill Eng. and Mach. Co. Manila  
H. P. Gregory & Co. Ltd. Sydney  
Blair, Reed & Co. Ltd. Wellington  
Wesselhoft and Poor Caracas  
Wesselhoft and Poor Bogota  
General Machinery Co. Tampico  
Pedro Martinto Inc. Lima  
Compania Italo-Americana de Importacion Buenos Aires  
A. E. Barker Johannesburg





# The Massachusetts Institute of Technology

## CAMBRIDGE, MASS.

---

The Massachusetts Institute of Technology offers Courses, each of four years' duration, in Civil, Mechanical and Electrical Engineering; Naval Architecture and Marine Engineering; Mining Engineering and Metallurgy and Geology and Geological Engineering; Architecture and Architectural Engineering; Chemistry, Chemical Engineering and Electrochemical Engineering; Biology and Public Health and Sanitary Engineering; Physics, General Science and General Engineering; and in Engineering Administration. These Courses lead to the degree of Bachelor of Science.

To be admitted to the first year class, applicants must have attained the age of seventeen years, and must satisfactorily fulfill entrance requirements in Algebra, Plane and Solid Geometry, Trigonometry, Physics, Chemistry, English, History, and French or German and one elective subject. Examinations are required in all subjects except Chemistry, History and the elective, the requirements for which are fulfilled by the presentation of satisfactory certificates. A division of these entrance subjects between different examination periods is permitted.

Entrance examinations are held at the Institute in September. In June, applicants will be examined by the College Entrance Examination Board in Boston, New York, Philadelphia, Chicago and many other cities in America and Europe. A circular stating times and places is issued in advance by the College Board.

Graduates of colleges and scientific schools of collegiate grade, and in general all applicants presenting satisfactory certificates showing work done at another college corresponding to at least one year's work at the Institute, are admitted, without examination, to such advanced standing as is warranted by their previous training.

Graduate courses leading to the degrees of Master of Science, Master in Architecture, Doctor of Philosophy and Doctor of Science are also offered. Special research Laboratories of Physical Chemistry, Applied Chemistry and Science have been established.

### PUBLICATIONS

Bulletins of General Information, Courses of Study, Summer Session, Advanced Study and Research, and the report of the President and the Treasurer.

*Any of the above-named publications will be mailed free on application*

For Bulletins and Information address

**MASSACHUSETTS INSTITUTE OF TECHNOLOGY**  
**CAMBRIDGE 39, MASS.**



# Don't Collect Time-Tables

Don't wear out shoe-leather "shopping" for railway and steamship accommodations. Don't spend unnecessary money wiring for hotel rooms. When you plan your vacation consult Raymond-Whitcomb, who have a library of time-tables, sailing schedules, steamship plans, hotel- and automobile-rates. With their assistance you will be able to escape a great deal of the pre-vacation wear and tear

---

## Individual Travel Service

For all who prefer to travel along itineraries of their own—whether in America or Abroad—however extensive or limited in field or time—the Raymond-Whitcomb Individual Travel Service is of inestimable assistance. We formulate trips, based on your individual choice; we make steamship, railway and Pullman reservations; we secure in advance hotel accommodations; we engage automobiles for short sightseeing trips or for comprehensive tours; we procure couriers and local guides; we attend to foreign consular visas and arrange for baggage-transfer, tips and taxes en route. If you consult with us you will find you will have nothing more to do, except pack, call a taxi and enjoy yourself

---

A summer Cruise to Iceland and the North Cape — June 26

Summer Tours to Alaska, the Rockies, Oregon and the Coast,  
and to Europe — frequently throughout the Summer

Cruises next Winter — Round South America, to the Mediter-  
ranean and Egypt, and to the West Indies

---

## Raymond & Whitcomb Company

Offices and agencies in more than fifty cities in Europe and the Orient

Executive Offices: 22 Beacon Street, Boston

BOSTON	NEW YORK	PHILADELPHIA	CHICAGO	SAN FRANCISCO	LOS ANGELES
17 Temple Place	225 5th Ave.—606 5th Ave.	1338 Walnut St.	112 S. Dearborn St.	657 Market St.	Title Ins. Bldg., Room 515